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MENTAL AND PHYSICAL HEALTH

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MENTAL AND PHYSICAL HEALTH

Reviews the literature for the seven-year period since the issuance of Vol.
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INTRODUCTION

THE chapters of this issue of the REVIEW reflect the scope and the nature of an ever-increasing attention being given to mental health by research and professional people in the behavioral sciences and education as well as in the medical sciences, public health, and allied fields. At the same time, there is a persisting concern about the physical health of young people in schools and colleges. One seldom is maintained without the other. Within limits considered in the seven chapters, a healthy human being is marked by some degree of *effective* in contrast to *borderline* or *ineffective* behavior. He or she is an individual who functions effectively not only as a competent member of a community in terms of age-graded expectations but also as a person who is relatively free from the kinds of "dis-ease" which interfere with psychological well-being and interpersonal competence in male and female roles.

Another theme indicates the focus of educational policies and processes together with underlying basic research and action studies to test ideas about mental health and education. Thruout the chapters, the emphasis is upon *prevention* rather than *recovery*. Prevention of mental illness and physical disease or handicaps may be estimated in operational terms by increments in the proportion of effectively functioning persons among those served by the schools or other community agencies. Likewise, recovery could be measured in terms of increments in the proportion of persons removed from borderline or ineffectively functioning categories of mental and physical health as a consequence of referral, diagnosis, and treatment followed by favorable prognosis. The schools, of course, are concerned with the *referral* of both borderline and ineffectively functioning persons to helping and treatment agencies when teachers and personnel in special school services no longer can cope economically or professionally with particular cases. Moreover, school and college people necessarily are involved in the *rehabilitation* of those who plan to continue their education upon recovery.

The seven chapters of the present REVIEW were made possible by several grants-in-aid from the Joint Commission on Mental Illness and Health to contributors for research and clerical assistants and, in some cases, as stipends to release them from other university duties. In accord with the *Mental Health Study Act of 1955*, approved by joint resolution of Congress, the Joint Commission is made up of individuals representing a score of organizations active in the field of mental health with Dr. Jack R. Ewalt, Director, and staff located in Cambridge, Massachusetts. A grant made thru the National Institute of Mental Health, now being supplemented by funds from private sources, permits the Joint Commission to carry out a program of inquiries into and evaluations of resources, methods, and practices for diagnosing, treating, caring for, and rehabilitating the mentally ill, including research aimed at the prevention of mental illness. Under

these circumstances, the Committee on Mental and Physical Health of the American Educational Research Association accepted the invitation of Dr. Ewalt and his staff to cooperate with the Joint Commission with the understanding that traditional policies of the REVIEW OF EDUCATIONAL RESEARCH as to resulting publication be maintained.

The contents of this issue of the REVIEW, then, also may be regarded as part of the basic materials of the schools and mental health wherein AERA has been associated with the Joint Commission. This initial stage is to be supplemented by a report of a work group to study mental health in the schools headed by Wesley Allinsmith, assisted by George W. Goethals and a staff in the Graduate School of Education at Harvard University. Their emphasis is to be not only on an assessment of existing information but also upon a careful search for what is new and a determination of what appears most promising, new or old, with regard to mental health and education.

The nature of the present issue of the REVIEW and the lapse of seven years since the last issue upon "Mental and Physical Health" in December 1949 called for some modifications in policies and procedures. First, the members of the Committee approved of a tentative outline suggesting content and kinds of questions to be answered in May 1956 after conferences with Dr. Ewalt and his staff. Then each contributor not only searched the usual published literature but also requested progress reports of promising research and action projects which could be made available to interested research people. To obtain as nearly complete and representative coverage as possible, certain references available up to September 1956 have been included where necessary to give a balanced view of the state of theoretical proposals, research findings, and mental and physical health outcomes up to the end of June 1956.

CARSON McGUIRE, *Chairman*
Committee on Mental and Physical Health

CHAPTER I

The Emerging Concept of Mental Health in Education

W. CARSON RYAN

MENTAL health is by no means a new concept, nor is it new in education. In one form or another, as Jahoda (13) points out, it has occupied the minds of men for thousands of years. Recently Stevenson (33) has noted that one of the American pioneers in this field, William H. Burnham in his book, *Great Teachers of Mental Health*, compared leaders in education over two milleniums and found their principles identical with those of mental health. Certainly in American educational history the concept of mental health in education was recognized years ago. When Cyrus Peirce as head of the first normal school in New England in 1839 was seeking candidates for his school, he begged the local-school committees to send him persons possessed of "good health, a vigorous and buoyant constitution, a fund of lively, cheerful spirits," and particularly a "love of and sympathy with children."

The modern movement for mental health in the United States is usually thought of as dating from the publication of Clifford Beers's book, *The Mind That Found Itself*, in 1908. Interest centered at first, quite naturally, in the improvement of institutions for the insane or mentally ill. It was not long, however, before interest in prevention of mental illness and in improvement of mental health became significant aims of the organizations and individuals active in mental hygiene work. At this point education entered into the picture. National educational commissions were especially active in the 1930's and 1940's, and they secured considerable foundation support for important research projects in education involving emotional development and human personality (29).

Prior research activities in mental health and education are reported in issues of the REVIEW published in 1946 and 1949; the present issue deals in the main with developments from 1949 onward. This chapter represents an attempt to conceptualize mental health in education in terms of selected literature.

Aims of Mental Health and Education

"In a very fundamental sense," said the UNESCO report of 1955 compiled by Wall (43), "the whole education of children, and indeed the whole of mental hygiene, turns upon the solutions sought and found to the twin problems of maintaining personal security and of moving forward to resolve the continual challenges presented by the environment." On the cultural or social scene, the report pointed out, there are likely to be as many definitions of mental health as there are different ways of life. But it is possible, the report insisted, to base certain principles of mental hygiene

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on our developing knowledge of human psychological needs and an evalua-
tion of the means of satisfying them. "What distinguishes a response which
is healthy in terms of future stability from one which militates against
mental health, is whether it in general brings the child into an acceptable
and satisfactory relationship with his environment or tends to withdraw
him from it."

Analyzing the aims of education in relation to mental health, the Wall
report suggested that underlying many postwar educational reforms lies
recognition of the fact that the task of the school has considerably changed
in the past half-century. The old formulas and attitudes are insufficient
for current needs: "However much in our theory and philosophy we may
attempt to isolate the task of the school as one of a purely intellectual
discipline and formation, we cannot escape the fundamental emotional
aspect of all learning."

As chairman of the committee that prepared the National Society's 1955
yearbook on mental health in education (24), Witty showed how mental
hygiene has proceeded in several decades from preoccupation with abnor-
mality to an emphasis on normal wholesome development. Reorientation
is to the point where "mental hygiene is now considered by some educators
as being primarily an attitude which influences the teacher's behavior at
all times—in his personal relationships with pupils, in his practice in
marking, promoting, and counselling boys and girls, and in other major
and minor incidents of his entire school day."

Repeatedly in the recent literature a similarity appears between goals
set by mental hygienists and by educators even when there seems to have
been no particular collaboration of representatives of the different pro-
fessions involved. Stevenson (34) distinguished three contemporary goals
for achieving a mentally healthy population: restoring mental health to
those who are mentally ill, protecting people generally against hazards to
mental health, and raising the level of mental health in those who are well.
The third goal of positive mental health is important to the whole popula-
tion, just as are our schools. "In fact," Stevenson says, "the school is the
chief instrumentality of a positive mental-health program."

Similarly Sutherland (37) in a review of 12 years with the Hogg Foun-
dation for Mental Hygiene concluded that education has moved from a
simple process of learning to read, write, and spell, to the complicated task
of learning how to live well in an intricate and complex culture. His report
pointed out that the development of the individual to his fullest intellectual
and emotional ability is the joint goal of all education and mental health,
and that all teachers need to understand the human materials with which
they deal. Consequently the Foundation's emphasis henceforth was to be
upon research in the maintenance of mental health rather than upon the
psychiatric treatment of ill-health.

In 1950 Menninger (21) told the members of the Association for
Supervision and Curriculum Development that psychiatry and education
have much in common. Both, he said, have the primary aim of helping

the individual adjust to life. He reminded them that three years before, the organization then known as the International Committee for Mental Hygiene had 22 commissions in different parts of the world, composed of psychiatrists, educators, and social scientists, conducting study seminars on various aspects of education in relation to mental health. He regarded the function of the school as second only to that of the father and mother in the home in facilitating the development of good mental health for the child.

That "mental hygiene's contribution is to help teachers become more effective teachers, not part-time therapists" was the conclusion reached by a team of psychiatrists, educators, and social workers operating with teachers in a school-based mental hygiene program in Rochester, Michigan (8). The members of the group agreed (a) psychological education of the teachers should emphasize the fact that their feelings are important in the educational process; (b) teacher anxieties are principally activated upon the discussion of ego-threatening material; and (c) "the success or failure of this and similar programs depends upon the ability of the therapeutic team to accept and support the teacher in the role of the teacher." They concluded that psychological efforts failing to recognize fully the real educational role of the teacher cannot succeed.

Five major goals for mental health education were developed in 1953 by the Michigan Department of Public Health (26) on the basis of an inquiry involving 64 experts in this field: (a) to disseminate knowledge and develop understanding of the underlying principles of mental health; (b) to promote the development and maintenance of good mental health in children; (c) to create informed public interest in the problem of mental illness; (d) to develop the community aspects of the mental health program; and (e) to promote training of personnel. The report stressed the necessity for training teachers and school administrators in child development theory, in the elements of the psychology of adjustment necessary to recognize children with problems, and in developing the ability to maintain a mentally healthy classroom atmosphere. It recommended: screening of personnel to assure well-adjusted teachers; developmental health curriculums in school systems to help children make satisfactory adjustments; and, in general, the adjustment of school practices to children's emotional needs and the development of mental health literature appropriate for children of all ages.

Reviewing a number of school mental health research projects, Biber (3) concluded that the school plays a distinctive role in relation to the health of the community and that conditions basic to mental health cannot satisfactorily be met by instructional materials alone. As positive moves toward furthering mental health in school, she listed more teacher studies of individual children, increased variety and abundance of materials for children's use, greater pupil participation in planning, programs developed more in relation to children's interests, more opportunity for creative expression, classroom arrangements that allow for mobility and encourage

communication, increase in informality and in warmth of the school's climate of interpersonal relations, more contacts and better understanding between parents and teachers, and decrease in use of humiliation and punishment as methods of control. The most difficult challenge, Biber concluded, is to offer teachers interpersonal experience so important subjectively that it affects their attitudes and relations to children.

Research and the Concept of Mental Health

In the very first sessions of the Expert Committee on Mental Health of the World Health Organization the need for research was stressed. "If the preventive mental health programme of WHO is to become progressively more effective," said the report (46), "not only must existing knowledge be widely applied, but WHO must also actively encourage research which sets out to fill gaps in fundamental knowledge." The Committee recommended (a) research into the biological, psychological, and cultural determinants of personality structure; (b) study of the relationship between individual personality structure and patterns of group structure, behavior, and relationship; (c) the effects of rapid changes of culture pattern and social organization upon mental health and the means of preventing and mitigating any ill effects of such change; (d) the extent to which the incidence of psychomatic affectives is influenced by social, economic, and cultural factors and individual characteristics and personality structure; (e) the relationship between psychological disorders or states on the one hand and infective processes, nutritional deficiencies, and biochemical disturbances on the other; and (f) the etiology and treatment of psychiatric disorders.

It is generally admitted that the concept of mental health is itself an elusive one. Jahoda (13) pointed out that there exists no psychologically meaningful and, from the point of view of research, operationally useful description of what is commonly understood to constitute mental health. In an effort to determine criteria Jahoda considered five possible ones: absence of mental disease, normality of behavior, adjustment to environment, unity of personality, and correct perception of reality.

Witmer and Kotinsky (45), attacking the problem of "personality in the making" with specific relation to the school, were concerned with the health of the emotions. They noted how educators in recent years have more and more become interested in the development of healthy, happy, and socially effective personalities—a thought stream that derived from the study and treatment of the emotionally or mentally ill, and can be roughly designated as the mental hygiene approach. But how could explanations of factors in personality development and functioning that came from the clinic and the hospital find their way into thinking about education and the school? The answer is that at three significant points—the concept of the development of the whole person, functioning of the indi-

vidual in his social milieu, and increasing concern for purpose and motive
—the fields of education and mental hygiene impinge. Similarly, Rivlin
justified preparation of the yearbook of the National Society for the Study
of Education (24) treating mental health in the schools as "in accord with
objectives stressed by forward-looking people in education who seek, as
the goal of education, maximum development of every boy and girl in
accord with his unique nature and his needs."

The content of mental health education, according to Lemkau (19),
consists of two general types of material: that pertaining to personality
growth and development, and that having to do with psychological mecha-
nisms, including those relating to the distribution of emotional forces in
groups. Jersild's concept (15) stressed the teacher's understanding and
acceptance of himself as the most important requirement in any effort to
help students know themselves and gain healthy attitudes of self-acceptance.
For Jersild a major concern is "anxiety" and this should, he believed, be
an essential topic in teacher-training programs. He added that for many
the freedom to feel is an even more significant issue than freedom to think.
Ninety percent of the teachers and other school workers consulted con-
sidered this idea of the obligation of the school to promote self-under-
standing a very acceptable one.

For Bühler and her associates (5) the concept of mental health in
schools meant an ability for children "to build constructive relationships
with other children . . . . to relate in constructive ways to adults and the
authority which they represent, avoiding oversubmissiveness on the one
hand and excessive rebelliousness on the other," and "learn to develop
insight into their own liabilities and limitations. Mental health is largely
dependent upon feelings of worth and self-respect." That the school has
indeed become more conscious of its responsibility in mental hygiene was
stressed by Vaughan (42): "The modern concept of the purpose of educa-
tion is the one that mental hygiene has evolved, namely, that the school is
to train the whole child, to teach him to think, yes, but also to help him
to satisfy his emotional needs in more mature ways and to prepare him
as a social being to assume his full role as a citizen. *Wholesome personality*
is the objective, on the positive side; *the prevention of personality dis-
orders*, on the negative."

Erikson's recognition of what the school can do (7) was in itself a
statement of the mental health concept in education. He assumed that there
are good, healthy, and relaxed teachers, teachers who feel trusted and
respected by the community, and that they understand and can guide the
child. They know how to alternate play and work, games and study. They
know how to recognize special efforts and how to encourage special gifts.
They also know how to give a child time. They know how to handle the
child to whom school, for a while, is not important and rather a matter to
endure than to enjoy, or the child to whom other children are much more
important than the teacher and who shows it.

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In answering the question as to whether there is sufficient knowledge about mental health and the prevention of mental illness to provide content for a mental health program, Spillane (32) concluded that even if there were less scientifically validated information and fewer agreed-upon concepts and principles in the field of mental health than are now available, there would still be sufficient material upon which to build a mental health education program.

From time to time, however, some concern is expressed over lack of clear definition. "There is no uniformly accepted definition of mental health," the National Institute of Mental Health evaluation report (41) pointed out. The report cited Jahoda's statement: "Perhaps the greatest handicap for a systematic study of the social conditions conducive to mental health is the very elusiveness of this concept."

That there are serious gaps in the literature of mental health was emphasized by Felix (9). He said that we need more people to make research results more useful and that only recently has there been proper interchange between the people who provide treatment and the people who do research in the behavioral sciences.

One of the most significant research activities in mental health was the Forest Hill Village Project carried out in Toronto, Canada. As reported to the Fifth International Congress on Mental Health in 1954, the research aim stood high. Seeley (30), director of the project, summarized it as designed to "study an upper and middle class community, to describe its way of life, particularly with reference to child-rearing practices, and, if possible, to examine carefully the bearing of these on the mental health of its children." But, Seeley explained, "We wished to be, and were, involved in action." The project operated a child guidance clinic in the schools, initiated what came to be called "counselling teams," helped special group discussions with children in their classrooms, and shared extensively in parent education. The members were drawn into school staff training and other community activities.

In the effort to prepare a new type of mental health personnel for the schools of Canada, those in charge of the project selected not only people who were first and foremost teachers, but "teachers who had been put into possession of such attitudes, knowledge, and skills as to make them leaders fitted to improve, coordinate, and focus the mental-health activities of the school." These trainees "were required to do research contributing to the main research," the report says, "because we felt the capacity to do research would be an indispensable tool for the would-be mental health leader when he returned to his own community." Thus the training program was to strengthen both research and service. Five research enterprises were included in the Forest Hill Project: a test of selected effects of the "human relations classes"; a "psychography of the community"; an ethnology of the community (with special reference to child-rearing practices); a case book shaped from the clinic materials; and an inde-

pendent appraisal of the work done by retrained teachers in the various communities to which they returned.

Nine programs for the promotion of mental health were included in the volume prepared by Chamberlain and deSchweinitz (6) for the Mid-century White House Conference on Children and Youth. They were: (a) The St. Louis Council for Parent Education; (b) the Pelican Pamphlet Series of the Louisiana Society for Mental Health; (c) the Psychiatric Consultants Service of the Los Angeles City Health Department; (d) the Rochester Child Health Institute and the Rochester Health Center Counseling Clinic; (e) the Phoenix, Arizona, Mental Health Center; (f) the Human Relations Teaching Program of the Delaware State Society for Mental Hygiene; (g) the Consultant Service on Parent Education of the California State Department of Education; (h) the Institute of Child Study at the University of Maryland; and, (i) the Hogg Foundation for Mental Hygiene in Texas.

Curriculum and Mental Health

Both the curriculum of the school and the conditions of the home frequently are criticized by persons concerned about the mental health of young people. Failure of the traditional curriculum to meet the needs of many students and failure of schools to realize and satisfy individual differences and achievement were two of the leading mental health hazards in school revealed in an Oregon study (18) made in 1951, altho "unsatisfactory home conditions" headed the list of situations found to have a serious effect on the mental health of children.

There is general recognition in presentday literature, however, of the fact that what really goes on in all the aspects of life in and about the school is much more comprehensive than what is officially labeled curriculum whether the label be attached to subjects, activities, or something else. A generally accepted principle, tho by no means universally lived up to, is that the school must somehow provide real motivation if it is to be helpful to children and youth in maintaining and strengthening mental health. In the words used by the authors of the Philadelphia Early Childhood Project (40) in the title of their report, "They Learn What They Live."

Some of the problems in setting up a mental hygiene curriculum in public schools were described by the psychiatrist of the Cincinnati Board of Education (12). These were listed as follows: (a) developing an understanding of mental health courses on the part of school administrators, supervisors, and principals; (b) selection of teachers emotionally suitable for leadership in such courses; (c) training leaders in an awareness of personal relationships and the meaning of group interplay and of their own reactions to the material brought out by the students; (d) assembling suitable teaching materials; and (e) channeling of individuals in need of help to the proper sources.

Comparatively few curriculum studies have focused on the mental health point of view as derived from new knowledge in the behavior sciences, according to Rucker (28) who reported on the Delta County (Texas) curriculum development project. This project, sponsored jointly by the Hogg Foundation for Mental Hygiene and the Texas Education Agency, sought to center the total curriculum on mental health.

Early Childhood Education

The mental health concept in education has been particularly noteworthy in the research literature of early childhood education. Findings of Bowlby and others in recent years have shown so clearly the significance of what happens in the first 18 to 30 months of child life that more and more attention has been given to this period in the literature as well as in actual educational provisions. Especially important were the international surveys sponsored by the World Federation of Mental Health and the comparative case studies of children (31). The Chichester seminar on Mental Health and Infant Development was the first of its kind in which a number of people from different professional disciplines and from many countries were gathered together to study a specific aspect of the mental health field. The seminar was based on a series of studies of actual children used for teaching purposes by the highly qualified members of the faculty with case material collected from the United Kingdom, France, and the United States.

An important development of the past few years has been the parent cooperative nursery school (39). At least one recognized authority in the field of early childhood education has described this type of early childhood education, with its close and cooperative relationship with parents and the home, as a primary agency for mental hygiene. Mead (20) noted that the recent research in early childhood education underscores the importance of the early years for social development in contradistinction to the great emphasis which pediatrics and maternal and child health services have placed on physical development.

Emotional Climate

Emotional climate is emphasized in a number of current studies of mental health in education. Moustakas (23) reported a study in which 34 teachers in four school systems attempted to create a special classroom atmosphere conducive to emotional growth. All agreed that considerable time was needed to create an atmosphere of "warm permissiveness" in the classroom; whether any interpersonal relationship created in the classroom has lasting influence on children was a question not fully answered. In a study of an experimental mental hygiene approach in the elementary grades, 14 of the 26 children, many of whom were aggressive and unsettled, seemed to follow a definite pattern thruout the

experiment; these were helped by having "an acceptable outlet." Experimentation of this type was found to be valuable in freeing the teacher to function in terms of his own values.

Studies by Jersild (14, 15, 16) had to do particularly with one of the basic concepts of mental health and education; namely, that for any teacher understanding and acceptance of self is the most important requirement he needs to help students know themselves and gain healthy attitudes of self-acceptance. This concept, according to Jersild, means that in practical terms each teacher seeks as best he can to face himself and to find himself in order to further his own growth.

A Wayne University group carrying on a four-year experiment with teachers concluded that the psychological education of teachers should be preponderantly in the direction of giving them general and unquestioning acceptance of the fact that their feelings are important in the educational process. Rocchio and Kearney (27), however, found that a course in mental hygiene did not necessarily aid a teacher to improve interpersonal relationships in the classroom. Describing an experiment in psychiatric case studies with school teachers and other personnel, Kanzer (17) concluded that the introduction and development of psychological insight among teachers is one of the most important problems of prophylactic psychiatry, but he insisted that such orientation should be toward educational, not therapeutic, goals. In a group therapy program operating in St. Louis County, Missouri (4), the classroom teacher was the case finder; success or lack of success in the experiment seems to have depended, in part at least, upon general understanding of mental health concepts by the school teacher and other school personnel.

Importance of the emotional climate in schools has long been realized (10, 33, 35, 39). Probably the most important single contribution the school can make to its students in mental health, according to Rivlin (24), is to see that the emotional climate of the classroom is wholesome: "No matter what else the teacher seeks to achieve, his major goal must be to see that the quality of the human relationships is such as to assure each pupil of the understanding and the sympathy he needs in order to develop sound emotional health." Teamwork was stressed by Strang (36); she conceived of the teacher in a mental health situation as a member of a professional team made up of teachers, pediatricians and other physicians, nurses, psychiatrists, psychologists, social workers, group workers and sociologists, semanticists, speech correctionists, remedial teachers, anthropologists, judges in juvenile courts, and leaders in religion and parent education. According to Hermann (11), most of the studies in this area showed that whatever the theoretical concept of mental health might be in the administration or in the community, in the actual situation it was the day-by-day contact with the teachers that counted most heavily. She referred to the late James S. Plant (25) who used to ask for teachers who are sensitive to the emotional as well as to the intellectual needs of pupils.

Whether teachers themselves sufficiently understand children's behavior
to help develop good mental health in the classroom has been the subject
of considerable discussion and some research over the years. The question
has persisted ever since Wickman's study of the late 1920's (44) revealed
such discrepancies between the kinds of child behavior teachers were con-
cerned about in the classroom and those which mental hygienists con-
sidered serious. Stouffer's 1952 study (35) showed today's teachers
apparently in much closer agreement with psychologists, psychiatrists,
and psychiatric social workers as to the seriousness of certain problems
of children's behavior than were the teachers in Wickman's day. But even
the Stouffer study showed that of the 10 problems rated the most serious
by the teachers only two were found in the 10 rated most serious by the
mental hygienists. And in an Illinois study of summer-school students,
mostly teachers, Gaier and Jones (10) found a better attitude toward
classroom behavior than in the earlier studies, but they also found suffi-
cient evidence of lack of understanding of child behavior to lead to their
comment that "undergraduate training in the area of mental hygiene was,
in a number of cases, shockingly incomplete."

Significance for mental hygiene of work in sociometry was brought out
by Jennings in the 1950 yearbook of the Association for Supervision and
Curriculum Development (2). "The inter-personal structures of children's
groups, when studied in relation to the children's motivations for their
choices and projective expressions," says the yearbook, "disclose several
tendencies that have importance for the mental hygiene of development
and growth." The use of the sociometric interview was described as
having special mental health significance since it could help the child
articulate his feelings.

Rankin and Dorsey (26) concluded that the Detroit School Mental
Health Project (1947-1952), which was designed to conserve and promote
the mental health of children, justified the underlying assumption that
"the schoolroom environment will be most conducive to mental health
when teachers revere individuality . . . , when they understand how they
and the children grow and develop, and when they have skill in dis-
covering and meeting their own basic needs and those of the individual
children in their care." At the conclusion of the project it was decided
that many teachers lived and taught more nearly than before in accord-
ance with the principles of mental health; that teachers had more self-
respect, *attended* more to children, were more humane, more considerate;
and that there was more widespread concern about mental health, not only
in the schools, but in the community.

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CHAPTER II

Cultural Factors in Mental Health:
An Anthropological Perspective*

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THIS review has been written by two psychologists who have been exposed to anthropological thinking in a setting of cross-disciplinary research. A concern with problems of mental health in relation to education led us to accept the task of looking at anthropological literature and defining problem areas in the light of this interest. In limited space we have not found it possible to cite meaningfully all the pertinent items; additional references useful to one who pursues research in the general area of mental health and its relationship to anthropological variables may be found in other publications (23, 26, 32, 40).

The chapter is presented in four main sections. First, the principles of mental health as related to the individual and his culture are discussed. Then key problems are exemplified with references to anthropological findings. The third section relates the preceding two to American education. The fourth section introduces briefly a rapidly developing technic for assessing theory and deriving new insights into human behavior. Since corresponding numbers of the REVIEW in the past have not dealt extensively with theory and research from the present orientation, references are made to literature published before 1949.

Conditions Affecting Health and Illness

Psychic illness is a function of inadequate resolution of emotional conflict. Both cultural and idiosyncratic life experiences influence the causation of conflict and the means by which it is resolved. Cultural forces provide two avenues to the resolution of conflict: institutionalized paths and leeway for idiosyncratic solutions. Only by distinguishing the cultural from the idiosyncratic can we be clear about the kinds of factors involved and what can be done to improve mental health. As will be seen in the following paragraphs, we are deliberately making a somewhat artificial distinction between cultural and idiosyncratic factors. In reality no idiosyncratic influence can be completely divorced from its cultural implications.

Idiosyncratic factors are those unique events in a person's life that distinguish his development and present situation from those of other people who have very similar cultural characteristics. Examples of these

unique events are the person's ordinal position in his family, his physical health and appearance, his intelligence and talents, and ways in which the parents differ in their typical personality characteristics from people in their general cultural circumstances. Particular events that have formative influence, such as death of a parent or sibling, other frightening or traumatic experiences, and the timing of these in relation to developmental phases, are also important.

The second cluster of factors influencing mental health comprises those experiences common to a cultural or subcultural group. These include socioeconomic or status characteristics; ethnic attributes such as race, religion, and national origin; rural-urban locus; regional factors; and those socialization experiences and events, those inculcations of values and world views, that make a person part of one group and distinct from members of another (40).

In writing about mental health, some contributors have emphasized the idiosyncratic or individual events. This has been true generally of those who approach personality from clinical experience. Freud and his followers have been criticized for ignoring cultural determinants (62). In contrast, other writers, particularly some anthropologists and sociologists, have stressed culture conflicts to the point of ignoring individual differences; that is, there has been a tendency to discuss pathogenic factors inherent in the situation of an entire people to the point of seeming to allege that everyone in the society is subject to the same influences and in the same degree. The implication is that everyone is the same in personality. From the viewpoint of an anthropologist interested only in the commonalties in personality, this makes sense. But from the standpoint of mental health it is a gross distortion. As we view the problem, both what we are calling idiosyncratic events and those experiences common to a cultural or subcultural group may be crucial in determining a person's mental health.

We may note in passing that some authorities in the area belong to the culture conflict school; they believe that mental illness is a function of the total social context and that programs of parent education in mental health, therefore, yield no immediate results (20). We, on the other hand, feel that parent education can minimize the idiosyncratic stresses on a child that are occasioned by parental ignorance of probable effects produced, for instance, by hospitalization, by sibling difficulties, by temporary or permanent separation from a parent, by sexual information, by encounters with death, and by a general failure on the parents' part to know how to read the child's "language of behavior" (25) so that they can support him thru stressful experiences.

In this review we are concerned with cultural factors. The circumstances under which these factors are important can be understood, however, only by looking briefly at mental health in a broad enough perspective to take into account situations where the idiosyncratic factors also may be relevant.

Classifications of Mental Health

A helpful way of defining circumstances under which a person becomes mentally ill is to talk of four conditions that necessarily occur. Illness, of course, is a relative concept. No one is ever either perfectly healthy or completely ill in all respects. For our purposes, illness is defined as the presence of signs of psychopathology or symptoms. The criteria are:

1. The person is in emotional conflict. Two of his ideals, needs, or goals are incompatible. If he is to satisfy one, the other is blocked. In actuality, a person often has several needs involved in a conflict or is in more than one conflict situation at once.

2. The person is unable to solve the conflict rationally. That is, he cannot find a detour to his goal or a way of surmounting the barrier, or he cannot discover a direct or symbolic substitute satisfactory for the blocked need.

3. The tension produced by the conflict leads to anxiety. He develops the feeling, "I can't stand it," and he fears becoming rattled, panicked, disorganized, or losing control of himself.

4. Having become anxious, he then either remains chronically so, with anxiety and its physiological concomitants as his major symptoms, or he resorts to immature, irrational methods of solution that relieve the anxiety. These immature solutions may or may not indirectly solve the original conflict by satisfying the opposed needs to some extent. Such solutions are accomplished by means of defensive compromises (defense mechanisms) which involve cognitive distortions and give rise to symptoms. The person's perceptions of his own feelings or of the environment undergo a change so that he sees things differently and feels more comfortable. In some cases self-delusion may even cause a patient to assert that he is happy, but his distortions leave him less equipped to deal accurately with the situation; a rational solution becomes less likely.

In contrast, a mentally healthy person, then, is one in whom the following conditions exist. In describing them, we are aware of the possible bias of the mental health movement itself in setting criteria of health explained in articles by Davis (17) and Seeley (57).

1. The person is not in conflict. This is the ideal state. In reality, everyone experiences many minor conflicts daily since life does not permit one to have full satisfaction in all respects. In defining health, we are speaking here of the absence of intense or chronic conflicts.

2. When in conflict the person has skills for solving it rationally.

3. When in conflict and unable to solve the matter rationally, the person has strong enough personality organization ("ego strength") or, as some would say, is "secure" enough, to be able to stand the tension. A person with these characteristics is often spoken of as having "frustration tolerance" or being able to "delay gratification"; tension does not put the person into a panic.

Everyone, of course, gets into conflicts that cannot be solved immediately. In such a situation, it is normal to be unhappy or tense. A healthy person, however, seeks some way to cope with events so that misery does not persist. When someone is chronically unhappy or tense, he can be considered mentally healthy only if his circumstances are such that there are no avenues of escape. Thus, a wretched and frightened prisoner in a concentration camp might be viewed as mentally sound if he were making the best possible adaptation (7). Yet, we cannot be content with the assurance that such a person is mentally sound when we regard him from a humanitarian viewpoint or in terms of society's needs for people whose energies are free for constructive use. We bemoan those situations that cause needless stress and consider them sources of illness even tho some victims have the strength to weather the experience relatively unshaken.

4. A person may still be considered healthy, for practical purposes, when, unable to stand tension, he resorts to defensive compromises, provided the mechanisms used are those that yield relatively mild distortions and provided they are not employed in the most extreme degree since any mechanism may be used to excess. Excess here is defined partly in terms of the social implications of the distortion. Some distortions, such as reaction formation, result in derivative behaviors that are socially acceptable and even socially desirable in certain cultural situations. Other derivatives may have devastating social repercussions. A facial tic may not be handicapping socially, but a tic that results in stuttering may cause secondary ill effects which undermine the person's health by putting him in further conflict situations.

We would have to say that a person whose life situation leads to very great conflict which could not be avoided would be considered sound even tho he showed symptoms if those symptoms were the minimally handicapping ones that could be chosen in the situation. Children are occasionally seen, for example, who engage in mild antisocial behavior. Upon investigation they turn out to be healthy in the sense that, in their life plights, the relatively minimal degree of pathology they are showing is the least disturbance that could be expected of anyone.

In evaluating health, we are thus forced to look at both the quality of a person's adaptation and the circumstances in which, and to which, he is adapting. Mental health, speaking loosely, consists of being relatively symptom-free and tension-free. Definitions in more positive terms that talk about "effectiveness," or ability to work and to love, follow logically from this more rigorous definition in terms of symptoms. A person who cannot fulfil the minimal criteria of social effectiveness is certain to be in conflict and highly unlikely to resolve the conflict in a healthy manner.

In urging consideration of a person's circumstances when evaluating his health, however, we have been suggesting that an important qualification is to be made: Health is situational. As Kluckhohn (40) has pointed out, *health* and *illness* are not substantive but relational terms. A person can

be spoken of as being well only in reference to a particular environment. To speak broadly about a child's health, we have to look to the future as well as at the present. A person who appears healthy may have a poor prognosis, that is, be headed for illness in a probable future situation. For example, consider a child who uses obsessive mechanisms to handle anxiety in such a way that he is meticulous in his schoolwork and therefore learns well and has excellent relationships with those in authority. Because his anxiety is handled, he also gets along adequately with his peers. Yet, how many adult roles in our society reward a person for getting 100's and for meekly being good? Very likely such a child will run into difficulty. Also consider a child who seems effective in school because his anxieties or unresolved conflicts are worked out in the freedom of an activity system in the school which allows acting out. Will his later life situation permit acting out? Alternatively, a child who is unhappy in school may turn out all right as soon as he is able to leave what to him is a frustrating academic situation.

Anyone under sufficient stress may appear ill. Often such a person is in a temporary difficulty from which he eventually recovers, never to be ill again. Therefore, assessments of present effectiveness have to be supplemented by asking questions about the future prospects. If these prospects imply a different kind of life from the present one, have the current experiences paved the way for adaptation to the new? If not, is the person adaptable enough to undergo the stress of transition? How will the ideals that a person carries with him be satisfied in the new life situation? These are very relevant questions for educators, dealing as they do with children who later leave the school situation for a tremendous range of life settings.

Relationship of Idiosyncratic and Cultural
Factors in Mental Health

Since our focus is upon cultural factors, we intend to deal with the subject of idiosyncratic events only so far as they are relevant for understanding cultural effects. Idiosyncratic factors can be sources of conflict: Some children of given cultural membership develop difficulties—for example, acquired fears—that other children of the same membership do not. Obviously the resolution as well as the genesis of conflict can be idiosyncratically determined. When an avenue which the culture provides for release—an "institutionalized resolution"—is not available to a person, he often finds an individual solution.[1] The ability of a person to find such

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[1] We do not include as "idiosyncratic solutions" those that get the person into trouble with his environment or that involve distortions of perception. These, of course, we call symptoms. Artistic efforts and unusual occupations can be considered in the category of idiosyncratic solutions unless they represent an integrated part of the culture's ways. Some painters, musicians, and writers are simply following one of the roles that the culture holds out as a solution; in such instances we speak of institutionalized resolutions rather than idiosyncratic. Other artists are more on the periphery of the society and can be thought of as having made relatively unique solutions. Behaviors that would not be considered socially desirable but solve conflict without provoking social repercussions may also represent idiosyncratic ways of handling conflict.

a solution is affected by the idiosyncratic characteristics of the person, for instance, by his degree of talent or inventiveness. Idiosyncratic factors also influence the capacity to use institutional solutions offered by the culture since talent and exposure to the guidance of particular people who serve as models are partly matters of accidents of upbringing. When a solution to conflict is not readily available, a person's capacity to stand anxiety depends on other considerations, such as how many other conflicts he is coping with at the same time, and therefore how much energy he has free. This is in part a matter of how many idiosyncratically determined disturbances exist. If the person is forced to resort to defensive distortions, the mechanisms used usually are a function in part of idiosyncratic influences.

Having examined the influence of idiosyncratic events, we can ask ourselves how cultural factors affect the causation and resolution of conflict. After answering the question in the abstract, we intend to cite examples from the anthropological literature to illustrate those points which seem especially relevant for contemporary educators in our society. As causes of conflict, cultural elements are most noticeable in cases of value discrepancies. We shall call these "built-in" conflicts. If a society emphasizes reverence toward the elderly but also acclaims efficiency and the discarding of the old or outworn, these partially incompatible goals present continual problems for the younger adults. In American society we place value upon both ambition and humility, upon competitive success and also upon sympathy for the loser, upon both frankness and tact.

Another kind of conflict involves marked shifts in cultural conditioning which cause children to undergo transitions of such a nature that previous learnings are no longer appropriate (6). This not only requires a period of stress owing to change, but the original learnings may have "taken" in such a way that the child has now irrevocably internalized them. We call this second kind of conflict that due to "discontinuities."

There is a third kind of culturally induced conflict when a person is simultaneously a participant in two cultural or subcultural systems. This occurs, for instance, when a person is a member of one group that is subordinated to another and is under pressure to adopt the ways of the dominant society. We shall call this type of conflict that of "acculturation."

Of course socialization pressures necessarily imposed on children in any society inevitably result in some frustrations that put a child in emotional distress. When there is an additional drain from inconsistencies of the sorts just mentioned, a society and its cultural agents are especially likely to make life difficult for young people.

We have been discussing cultural factors in the genesis of conflict. As for the conditions of conflict *resolution*, cultures commonly provide instruments by which the culturally created stresses and strains may be solved. Projective systems, such as religious institutions, often handle guilt feelings and other precipitates of conflict in a manner described by Kardiner

(37). Mother-in-law jokes relieve intrafamily hostilities. Kinship patterns may minimize economic anxieties. In our terminology we say that such solutions are "institutionalized."

A second way that cultures relieve conflict is in allowing latitude for idiosyncratic solutions. When a society holds that people who are different are automatically abnormal or bad, it restricts the variety of individual, idiosyncratic outlets. In such a case, the deviant who might have reached a satisfactory solution in his out-of-the-ordinary behavior is forced to use neurotic mechanisms or antisocial practices for lack of a direct and socially palatable solution. Thus he faces an additional conflict from the deviancy itself.

When conflict cannot be resolved quickly, the capacity of a person to stand stress rather than to develop symptoms depends upon the intactness of his personality. The latter is a function not only of the number of unresolved conflicts at the time but also of general cultural influences.

Finally we note that the type and degree of defensive distortion and the consequent symptoms evolved are affected by general cultural factors. As shown by Gillen (23), Hallowell (26), and Honigmann (32), culture helps to determine the nature of the defenses by defining which derivatives are acceptable.

The foregoing conceptualization of cultural influences has stemmed in part from the attempts of Beaglehole (5), De Laguna (18), Devereux (19), Green (24), Hallowell (26), Honigmann (32), Inkeles and Levinson (34), Kluckhohn (40), Spiro (59), and Wegrocki (64) to formulate some of the problems. In the next section we discuss some actual cultural situations as they illustrate the foregoing considerations.

Anthropological Evidence

The anthropological literature is vast. The ways in which human societies impose demands that cause conflicts in their members are myriad. For purposes of this chapter we are forced to select from the literature instances of particular kinds of conflict which appear to have some parallel to immediate mental health issues in our society, especially as these issues relate to education.

When two cultures come in contact, in some cases the two live side by side without meshing and in others one group is absorbed into the other (58). In the latter process individuals often suffer. They are subject to value clashes. The solutions which one way of life has offered for genera-tions must be given up and new ones accepted. Yet comparative cultural materials indicate that acculturation is not always a source of stress. In some cases it happens easily and at other times with great difficulty. It occurs with obvious mental health implications or with apparent sim-plicity. Some cultures resist change, and the members show little tension. Other groups, in the process of resisting, are unable to maintain their integrity as a psychological or social entity.

An analogous situation involving acculturation exists in the schools. Education, like acculturation, is the learning of new values as well as skills; and many members of American society come from subcultural groups which only partially have acquired the values of the larger society (4, 13, 14, 15, 29). Therefore, the strains of acculturation, of which social mobility is a special case, have great relevance for our thinking about mental health in relation to the American educational system. If we think systematically about various kinds of conflict situations which can exist, we will be able to understand more clearly the value conflicts of pupils in school.

As illustrations of culture conflict we may consider three instances of groups that have not acculturated to the larger American society: One group is left unscathed by marked value differences; another group goes thru a series of extreme tensions; the third disintegrates as an effective social organization.

Culture Conflict Producing Little Stress

The first example is a case where there are marked differences between the values of the dominant society and the subcultural group, but apparently there is little psychological stress upon the latter. This instance concerns those Spanish-Americans who live in the Southwest. A phenomenon which illustrates the Spanish-American reaction to "Anglo" attitudes is the issue of medical care analyzed by Saunders (54).

From the viewpoint of members of the dominant American cultural orientation, professional medical care is a positive value. When one is ill, one consults a doctor or goes to a hospital. The Spanish-American, when asked to accept these attitudes toward medical practice, finds in them matters antithetical not only to his ideas about medicine but to his whole conception of human relationships. He views sickness as a signal for great family solidarity. The patient is to be tended by his kinfolk, using traditional remedies. The idea of being cut off from kin, placed in a hospital, undressed, examined by a member of the opposite sex, and in general subjected to humiliating experiences leads the Spanish-American to choose to remain within his own group, nursed and supported by his family, in preference to obtaining an efficient cure of the illness in the isolation of a modern hospital.

The important thing to note here is that people persist in themes and attitudes which may be damaging to them when, as a countervalue, there is a tremendous psychological gain from such behavior. The fact that the Spanish-Americans retain identity with their own group and receive personal security from its members at a time of stress makes it very difficult to advance the attitudes of Anglo-American medicine in the Southwest. The fact of resistance to the values of the dominant group is due in no small part to the fact that treatment of sickness is one of the security systems of great value in the Spanish-American ethos. A new value can be resisted with great success because it offers to the individual a loss rather

than a gain in security. The Spanish-American can resist acculturation, in fact can completely ignore pressure between value systems, because of the tremendous amount of security his own group constantly holds out to him.

Culture Conflict Producing Extreme Tensions

The Sioux present a different and more complex picture of conflict according to Erikson (21), Macgregor and others (46), and Mekeel (49). Theirs had been a hunting culture, with most of their social institutions focused on realizing this way of life. When, with the coming of the whites, it became impossible for the Sioux to hunt, a crisis arose. With the help of the white man, the Sioux went thru a successful transition from a hunting to a herding society. The shift was not an overly difficult thing to accomplish since there was some correspondence between the earlier and later ways of life. Shortly after World War I, however, whites who became jealous of the Indians' success deprived them of their new livelihood. Having to give up a substitute role appropriate to the white man's world led to apathy and withdrawal. The old world of the hunter had disappeared, and successful adaptation was denied to them. Twenty-five years later the Sioux made a relatively more effective adjustment to the white culture, but only after a period of profound disorganization. Where the Sioux differ from the Spanish-Americans is in being dependent upon white culture for economic existence so that even with a secure family structure they had a very tragic period in their history. We do not intend to suggest that economic factors alone determine the success or failure of a group to resist successfully the pressures of acculturation. Instead we mean to point out that the more a particular group can maintain its *total* ethos, the more successful it can be in keeping its identity.

Culture Conflict Producing Disintegration

Another form of conflict occurs when acculturation triggers built-in stresses within the culture. The Ojibwa (26) and Skagit (11) Indians exemplify this type of dilemma. For generations these two groups maintained an intricate balance between certain aspects of their authority structure and limitations upon personal hostility. Among the Skagit, for example, economic cooperation demanded that in-laws be treated with the same deference as one's own family. With the coming of white culture, economic interdependence was not nearly so important. Hostilities once held in check were now openly indulged in. In consequence Skagit culture began to lose its integrity, and the people became disturbed. The Ojibwa had had a code of independence which delicately balanced the need to be skilful as an individual hunter and the fear of rivalry others would have of the more successful person. With the coming of the white culture the importance of the hunter lessened, and the role of the male in this new situation became unclear. As a result white culture has had a tremendous

psychological impact on this Indian group. In contrast to the Spanish-Americans who were interpersonally secure to begin with and therefore essentially identified with their own culture, the Ojibwa and the Skagit suddenly found hostilities exposed which they could not solve in their ingroup any more than they could accept the new values of the dominant white society.

Acculturation and Attitude of a
Society Toward Change

We have just discussed three possible reactions to acculturation in cases of value differences. In other instances the attitude of the society toward change determines whether acculturation poses a problem. The Navaho lifeway, for example, is very different from that of the white culture. There were some misgivings, therefore, when male Navahos were drafted into the white man's army. Yet, according to Adair and Vogt (1), their adaptation turned out to be relatively simple for the following reasons. First of all, the Navahos had placed a high value upon adaptability and for generations they had compromised with many different kinds of conditions and circumstances. The army situation was simply another of these. Moreover, being a warrior had value in and of itself. Therefore, despite marked differences between the Navaho culture and the white, the Navaho were able to get along in the army because of a value upon change and upon cultural borrowing that provided, in effect, an institutional resolution. Contrast the fate of another Southwestern Indian group when they underwent the same experience. The Zuni, like the Navaho, were asked to be part of the white culture to the extent of joining the army (1). But for generations the Zuni had held as a value the primacy of their own culture and its unchanging institutions. The Zuni male who went into the service faced a double dilemma. In addition to being asked to accept change, a value which his own culture did not possess, he was viewed as an outlander by his own group who were afraid he might in returning attempt to incorporate new ways into the old pattern. This is in sharp contrast to the situation of the Spanish-American who interacts with American culture without reprisals from his ingroup but constantly is rewarded in one way or another for returning to his own group and its emotional security.

Still another acculturation situation occurs when a group, altho markedly different in some respects, shares certain key values with the larger society. This is true in the case of the Japanese-American, studied by Caudill (9). Acculturation is a relatively easy matter since there is a great deal of correspondence between the values of the American middle class and emphases on achievement and self-control which are stressed among the Nisei. Altho American and Japanese families differ markedly in their authority structures, there is enough communality of central values so that acculturation takes place in large part without debilitating stresses.

Child-Rearing Practices, Education,
and Culture Conflicts

In addition to difficulties in acculturation, there is another kind of conflict which has been discussed with great clarity by anthropologists. This is what Benedict has called the issue of "discontinuity" in cultural conditioning (6). It must be borne in mind that children growing up in any culture are subject to stress from two rather different directions. First, the severity or strictness of the child-rearing practices thru which a child is introduced to his culture varies tremendously the world over. Thus, a child brought up with high socialization anxiety, as are middle-class Americans or the Ashanti of Africa, has a more rigorous and stressful childhood than the Sirion or the Navaho (67). Parenthetically, real questions about socialization anxiety among the American middle class (16) have been raised by an anthropologist (32) and by more recent research (27, 45, 56). But as important as the question of socialization anxiety may be in and of itself, there is another aspect of being introduced to one's culture which is possibly even more tension-producing. This is whether the training is consistent over a period of time.

For example, among the Kikuyu of Africa (38) there is a clear correspondence between the age of the child, the amount of responsibility he is permitted, and his status as a member of the group. Many primitive tribes pattern their "age grading" in a similar manner. In our own culture, on the other hand, we require a long period of dependency in some respects but keep insisting upon achievement and independence in others. We ask a person before he has reached the mystical age of 21 to be a member of the armed forces but, in most areas of our country, we deny him the privileges, such as voting, which go with such adult responsibilities. Erikson (21) has suggested, following Freud's classical observation (22), that the long period of dependency of the human animal creates intrapsychic dilemmas. The price of this may be turmoil without an apparent resolution when expectancies become confused, unrealistic, or unobtainable to the individual.

In relationship to our schools we should ask whether children are given the opportunity to practice, symbolically or directly, the roles that are to be adopted after a period of formal education. Just what is the validity of the expectancies which the school initiates? To what degree is there possible incompatibility of the school experience with the family environment? When one questions whether the school and its teachers are preparing a child as much as they might for the probable circumstances of his adult life, one becomes troubled by the possibility that our procedures of formal education are doing little to lessen the discontinuities which our children experience and may even be heightening them.

In terms of the examples of culture conflict which we have presented, some recapitulation is in order before going on. We have suggested that acculturation conflicts and discontinuities are important topics to consider

in detail since these are closely related to recurrent problems which school teachers and administrators face; that is, the problem of representing a body of values to a group of people who do not necessarily share the same values. Any school that has working-class pupils is constantly dealing with a kind of acculturation process, for educators seek to impose a set of standards to which a child must adhere or else be untouched by the school situation. Most of the studies of the problems created in our schools by pupils from different social classes have suggested that the typical child who comes from a working-class environment faces a conflict that can be solved only by leaving school prematurely. This almost always amounts to withdrawing from competition to win success in legitimate channels unless the person is gifted in athletics, music, or stagecraft. Many are doomed to delinquency because of their frustration in this situation (10, 13, 14, 15, 29, 31).

The picture, however, is incomplete. We have tried to suggest that an acculturation situation in and of itself need not produce such results. If the members of a subculture are secure, as are the Spanish-Americans, they can resist acculturation without feeling out of place, neglected, or hostile. If a pupil comes from a group that values change as do the Navaho or that holds certain key values in common with those of the dominant culture, as do the Nisei, the child can accommodate to the middle-class standards in school.

The greater proportion of American schools have to deal with large numbers of working-class children. If we limit ourselves to an oversimplified analysis of class differences, we fail to take into account some of the hopeful avenues which may be open to us when we understand the psychological principles operating. The school is confronted with a nearly hopeless task only when a pupil has been taught at home not to accept new values or has developed unrealistic goals in school.

Recent research has suggested that the barriers between social-class groups are not as impermeable and rigid as has been supposed (12, 33, 34). We are constantly finding out more and more about the ways different social groups maintain their ideas or come to change them. Some of the new research has added valuable dimensions to the sociological materials which have been so useful in the past (42). Partly as a result of this work we are also getting for the first time interesting findings about upper-class children and their dynamics (43). We can be hopeful of understanding before long which of the social-class differences are important and which are relatively easy to circumvent. Still another dimension of recent thinking is to be found in researches that deal with mental illness and its relationship to different kinds of social environment. This topic has been discussed by Bettelheim (8), Eaton and Weil (20), Jaco (35), Kaplan, Reed, and Richardson (36), Klineberg (39), Malzberg (48), Moloney (50), Myers and Schaffer (51), and Rosen (53), as well as by Hollingshead, Ellis, and Kirby (30) and Hollingshead and Redlich (31).

Implications for Education

So far the focus has been upon cultural factors that produce conflict and influence its resolution. Recognition of the effects of cultural variation leads to consideration of another important dimension of mental health. Teachers in our society are typically either representative of or aspire to the dominant middle-class culture (63). Middle-class culture emphasizes an outlook toward the future (42), a conceptual approach to solving problems (47), various self-abnegations, and personal achievement (10, 15). Inevitably teachers reflect the values of the reference group to which they adhere, and that they have chosen to teach is some evidence of their acceptance of certain middle-class goals. Moreover, in the very act of performing his role, the teacher is properly espousing, and either implicitly or explicitly advocating, the middle-class virtues of planning, deliberation, self-control, and striving. Yet there is a danger that teachers are not effective as often as they could be. Altho the values they stand for are those of the wider society, many teachers are unaware that there are other possible values that a decent person might hold.

In short, a kind of ethnocentrism is common among educators. Those children whose backgrounds are different from the cultural ideal are seen not as a challenge for more ingenious instruction but as having "bad" tendencies which, if they cannot be overcome by frontal attack, condemn the child to minimal sympathy and encouragement. Here is an example of the help a teacher can gain from anthropological understanding in grasping the implications of the American custom of having children from differing subcultures in the same classroom. Any teacher with working-class pupils is dealing with children who are facing the task not only of learning what the middle-class children are asked to acquire, but also of coping with a largely new set of values.

Concepts of Adjustment

We believe that educators should question whether or not adjustment is a desirable criterion of health and examine what they mean by the term. *Adjustment*, to teachers, can easily mean conformity. In the framework of the traditional educational practices which were dominant until recent years, the criterion of adjustment was goodness and neatness in school; that is, conformity to adult middle-class values. There are difficulties with such a criterion. Many people now are aware of studies of teacher judgments of children's health which showed that the opinions of teachers differ from the evaluations of clinicians. They realize that a timid, inhibited, overmeticulous child, pleasing and tractable from the teacher's point of view, may be headed for emotional difficulties later in life (55).

Now a new type of adjustment tends to be sought in many school settings. This new measure of health is the social facility of the child, his "smilingness" instead of his goodness. A new type of conformity is

sought—that to the peer group. The use of countless sociometric tests has been one result. The possible origins and general acceptance of the popularity criterion of health are interesting signs of the time and products, perhaps of our age. Riesman (52) has called attention to a trend in our society in suggesting that more and more people seem "other-directed" rather than "inner-directed." They are being guided by peer values and practices rather than by unshakable personal convictions.

Swanson and Miller (61) extended Riesman's speculation and brought empirical evidence to bear on the topic. These authors agree that there is a decline of inner-direction but add a new dimension to the problem. They reason that there has been an increasing integration of members of our society into urban settings where there are large-scale business and industrial enterprises. Here job security is much greater, and risk-taking less, than was true in the small independent enterprises that used to be typical. Riesman's lost-in-the-crowd people are in a phase of transition from the emotional security of inner-direction to the new kind of security available in a complex "bureaucratic" organization.

Swanson and Miller assume that more lenient child-rearing practices are less likely to produce rigid internal controls, and they predict that these technics will be characteristic of families where the breadwinner is employed in a bureaucratic setting. The more "individuated-entrepreneurial" parent who is mainly self-employed, works in a small enterprise, or is in some other respect not integrated fully into the urban society will still tend to see his children as facing a risk-taking existence and as needing strong inner controls.

The argument is that the "bureaucrat" has less need of a sense of providing his own direction because he is subject to the elaborate external checks on his behavior that are provided in a complex organization. Taking a random sample of Detroit families, Swanson and Miller found that, as expected, it is the entrepreneurial middle-class families who use the more stringent child-rearing practices traditionally associated with the middle class and believed to produce relatively pervasive internal controls. The technics of the bureaucratic middle classes are less likely to have this effect.[2] Following this reasoning, we would have to predict that those teachers who are more inclined toward evaluation of children's health in terms of adjustment to peers come from bureaucratic families, and share their "other-directed" philosophy.

In addition to giving rise, perhaps, to an emphasis on popularity as a criterion of health, increasing bureaucratization of our society may be affecting the attitudes of teachers in other ways. A very interesting study conducted in Phoenix, Arizona, involved questioning a sample of the

[2] An attempt was made recently to replicate the Swanson-Miller findings. Unfortunately replication involved a sample that was not comparable, and there were other unavoidable differences. Nevertheless, its failure in large part to support the original conclusions has raised a question about the generalizability of the bureaucratic-entrepreneurial distinction as far as its child-rearing implications go. (Personal communication from Dr. Eleanor E. Maccoby.) Yet we believe the distinction is promising enough to justify pursuing our argument.

population about mental health (60). Interviewers gave respondents descriptions of emotionally disturbed people and asked what ought to be done. Two general kinds of answers were given. Some respondents suggested self-help; others suggested some kind of professional aid. It was then discovered that those people who suggested self-help tended to see the person as being to blame for his ailments because he was not using his will power to pull himself out of it, or "He lets himself worry." Those who suggested outside help more often saw the person as a victim of environmental circumstances or personality difficulties. In the emphasis on self-help, it is not hard to discern the probable presence of an exaggerated free enterprise ethic. Therefore we might predict that if the study were repeated with the necessary questions to make a distinction between entrepreneurial and bureaucratic respondents, it would be found that those who suggest outside help are the bureaucrats.

If this be true, the teacher from an entrepreneurial home, reflecting the attitudes of her childhood environment, is more likely than one from a bureaucratic setting to see a child who is not working efficiently as lazy instead of recognizing him as poorly motivated or having conflicting goals or emotional problems. The entrepreneurial teacher is more likely to see a child who displays aggression as an aggressive child and fail to realize that in some cases the behavior may be a result of strong frustrations. The fact is, of course, that the less aggressive children in the classroom may not be lacking in hostility but may, because of home cultural conditions, have learned to turn aggression against themselves. Similarly, if some pupils seem to be slow in complying with middle-class expectations of punctuality, cleanliness, and interest in academic tasks, the entrepreneurial teacher may interpret these children as ornery or stupid, ignoring the possibility that there are motives in some children to be true to the ego identities acquired at home and that these may even embody some very positive ideals.

Whether the differing attitudes toward illness revealed in the Phoenix study are correlated with the bureaucratic-entrepreneurial distinction is unknown at present. But we are safe in assuming that there are important factors associated with cultural change in the alteration of teachers' criteria of health from an emphasis on conformity to authority toward a focus on popularity with peers. Teacher attitudes, as well as pupil conflicts, may be, at least in part, a product of the culture.

Adjustment as a Criterion of Mental Health

We have considered two meanings given to the term *adjustment*. When a broad look is taken at our culture, as comparisons with other cultures allow, how satisfactory is either kind of adjustment as a criterion of health? Let us take first the case of the person who does adjust, regardless of whether the requirement is that he conform to peers or to adults. Is he necessarily healthy?

The conformer has the advantage of using the institutionalized means of resolving the culturally induced conflicts. If the society demands achievement, he achieves. He thereby avoids overt conflict with his environment. There may, however, be covert conflict. Conflict over cultural strictures does not necessarily result in deviation; some who have needs to deviate do not and yet may pay a price because of unsatisfied needs. In addition, the conformer may have idiosyncratic conflicts but, because of a narrow mold of conformity, may be handicapped in using idiosyncratic solutions. Finally, there could be implicit pathology in conformity. The most glaring example is the case of a sick society like Hitler Germany where Nazism undoubtedly represented a mutual symptom for many of those who went along with it—an irrational solution to what were presumably similar individual conflicts. Clearly, people may be normal in a modal sense and show pathological features (64).[3]

What about the case of the deviant? By deviant we mean a person whose personality or situation limits his using the institutionalized solutions. In not conforming he has some degree of overt conflict with the environment. He is forced to use idiosyncratic ways of handling his problems. If he is to be healthy, these must be available. When a culture restricts too much the idiosyncratic solutions that are allowed, the deviant is forced into serious overt conflict with his society, for example, delinquency (10).

Schools may try often to provide a range of conflict solutions by allowing for some individual differences, but even when a school intends an opportunity for self-expression, this often gets perverted into another kind of conformity demand. For instance, there is a practice in some elementary schoolrooms of having a "sharing" period each day in which the pupils take turns telling of their previous day's experiences, or they bring newly found pets or trophies to class. It frequently happens that such sharing is instituted or managed in such a way that soon the children are competing in the traditional ways either for teacher or for peer approval in their presentations; real spontaneity is gone, and each child feels compelled to find something to present, a painful experience sometimes for children whose home experiences are less rich or pleasant. Activity groups in which children are pressured to participate may provide satisfactions for some pupils, but other pupils need to be alone or need emotional support from an adult (41). Individual differences tend to become submerged.

The teacher should be sensitive to the needs of those children to whom following the current culture ideal is not natural. This applies, for example, to a shy child who may have a healthy interest in some hobby that absorbs his tensions (and that may even be of ultimate social value). If shyness is not accepted as an allowable variation, the child may be

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[3] In preference to the catastrophe that may be wrought by group neurosis, it would be better, as Devereux points out, to have many unorganized individual neurotics (19).

forced out of a potentially satisfactory adaptation. Teacher sensitivity applies also to children who are acculturating. When a teacher has the charity and understanding to recognize the need in such children for idiosyncratic solutions, the deviant has more chance to be healthy. Moreover, in some circumstances the deviant may even be more healthy than the modal personality. Of course, not all deviants are healthy but, in a society with built-in conflicts, it may be that the only healthy people are those deviants who find surcease thru idiosyncratic solutions. That is, the conformer in the society with built-in conflicts automatically has those conflicts.

The Importance of the Deviant

How much conformity to an abnormal environment is desirable? How docile would we want a child to be if the chief interest of a first-grade teacher is in getting the children to stand in a row with their feet all in perfect alignment? What ought a child to do in school if he observes instances of favoritism that do not touch him directly but affect a friend adversely? Ought he to accept the realities of human weakness and become cynical about favoritism, or ought he to protest? What about children in Nazi Germany who were asked to tell on their parents? And what about children who believe they discern error in things they are taught? Asch (3) recently showed that a high proportion of adults do not have the confidence to stand up for what they believe when they feel that everyone else sees the situation differently. Many of them ultimately come to accept the majority opinion, even against the evidence of their senses.

Because there are many things man does not understand, inquiring minds are needed to question established assumptions. For the sake of the intellectual creativity and scientific progress of our society it is essential that teachers lend support to deviant opinions so that children do not close their minds to new insights. Our goal in America is fulfilment of the individual, not the culture. So, from the present viewpoint, it is for the sake of the individual child's mental health that teachers are urged to support the attempts of their pupils to have the courage of their convictions.

We should face the fact that it may not be healthy in our culture to accept the competitive role—at least not for everyone. For those whose early learnings in a subcultural setting make it difficult for them to aspire reasonably to the institutional solution of success, or whose idiosyncratic conflicts preclude health thru competition, health may be possible anyway if the educators' insight and perspective help such pupils to solutions out of the main competitive path. Unfortunately teachers, recently as a group, seem to have been more sensitive to the disruption that an individual who deviates may impose on the cohesiveness of a group than to the damage a group may do by exacting conformity from the individual (19).

A critical reader might infer that the logical extension of the position we have taken would be to suggest that teachers spend most of their time

worrying about the individual needs of their pupils, for we have objected, and rather strenuously, to the teacher who tends to set absolute standards of conformity as criteria of health. Does it follow, then, that we are implicitly opposed to absolute standards and favor instead an extreme relativist position? Here again anthropological material may help us. While it is true that some types of personalities which fail to find fulfilment in one culture might possibly have flourished in another, to accept an idea of variance need not imply a lack of standards (41). Anthropologists are aware that some cultures encourage patterns of behavior which are extremely dangerous for the individual. The problems we have described the Sioux Indians as facing exemplify such a case.

Kluckhohn (41) has given some criteria which may be useful when he says that three things should be taken into account on the anthropological dimension before we can come to any kind of criteria about mental health. He suggests further that if we accept such criteria, we can avoid both the rigidity of ethnocentricism and the flaccid thinking of relativism (41). In any culture, behavior must have adaptive value. When a culture, such as the Kaingang studied by Henry (28), sets up a system of nonadaptive behavior which leads constantly to in-group rivalry and murder, and in the process destroys the society as a whole, this is not adaptive behavior. Here the criterion is that the individual does not behave in such a way as to survive. Secondly, one may ask whether in a culture an individual, in addition to surviving physically, finds a way of life to some degree tolerable and acceptable. Third, the people in a culture should have some degree of inner integration or harmony (41).

There can be no argument with the realization that some cultures display behaviors which are suggestive of mental illness. It is a matter of degree. Do these symptoms tend to be maladaptive, go against the adjustment of the individual, and keep him in a state of turmoil; or, are these behaviors, altho different from our own in American culture, intricate institutionalized methods of resolving conflict?

In short, the anthropological literature gives us insight and perspective on some of the facets of the causation of conflict and its resolution. Schools cannot be the sole socializer of children and are hardly to blame for the conflicts that children bring to school. Teachers cannot be super-human in order to do their main job in imparting academic skills and preparing children for conventional success in our society and at the same time make maximum leeway for individual differences. Moreover, if individual differences were given maximum play, there would be chaos, as happened in some extreme "progressive" settings; children require the help of a teacher in controlling themselves and they need some clear goals. Yet the goals need not be the same for everyone, and there may be charity for those children who have learned at home goals that differ from those at school. Where the teacher has enough understanding to appreciate cultural differences, there is hope that school may be a far more pleasurable

and, therefore, a more truly educational experience for many pupils. As in the case of many of the formulations in this section, our ideas have to be translated into research operations—action studies as well as experimental designs—to test suggestions we have advanced.

A Promising Source of Further Knowledge

As a conclusion to this review we would like to discuss briefly an important undertaking in the field of behavior science. Educators and scientists are vitally concerned with the validity of the theoretical propositions which guide their course of action. At the present time the cross-cultural method is being used extensively to test hypotheses using materials from anthropological field reports. The history and merits of the cross-cultural method and the ways it differs from the traditional comparative type of study have been reviewed in detail by Whiting (66) and by Whiting and Child (67). Because we believe the results of the cross-cultural procedure ultimately will be of crucial importance to educators, we would like to cite an example of how this particular method operates.

Whiting (65), in working with the Paiute Indians in the American Northwest, began to note a relationship between social control and social structure. On the basis of these observations in one culture she derived a series of hypotheses which suggested theoretical relationships between sorcery (a form of social control) and the social structure of the society. At this point in her research the question which needed to be answered was whether these relationships were true only of the Paiute or represented principles of human social functioning that would be found to hold among societies in general. Using ethnographic materials from a number of societies, she rated the absence or presence of sorcery and *independently* tabulated information about the types of social control. These ratings were then analyzed statistically. In terms of her findings she accepted, rejected, or modified her original hypotheses.

The method is dedicated to testing theory rather than exemplifying it. Recently such topics as achievement motivation (44), the internalization of values (67), and adolescent initiation rites (2) have been explored by this method. Our conviction is that the use of this technic eventually should greatly enrich and solidify our understanding of human behavior and clarify the conditions that promote healthy personality development and genuine psychological well-being.

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CHAPTER III

Factors Influencing Individual Mental Health

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A LARGE volume of materials bearing upon individual mental health has appeared in the literature of the medical and behavioral sciences since the corresponding number of the REVIEW in December 1949. The present chapter comprises only one possible selection and organization of theories and models, methodologies and findings, inferences and promising breakthroughs to new knowledge drawn to represent persons concerned and the large number of reports of the past seven years.

In addition to the sample set forth in the bibliography, valuable references may be found in other issues of the REVIEW. Especially recommended are: Chapter IV on socially maladjusted boys and girls as well as chapters on handicapped and mentally retarded children of the issue on "The Education of Exceptional Children," Vol. 23, December 1953; the part of Chapter II on factors influencing adolescent behavior of "The Educational Program: Adolescence," Vol. 24, February 1954; Chapters IV and V on personality and social development of "Growth, Development, and Learning," Vol. 25, December 1955; Chapters III and IV on structured tests of personality and projective technics of "Educational and Psychological Testing," Vol. 26, February 1956; and a number of references in Chapters III, IV, and VII of "Twenty-Five Years of Educational Research," Vol. 26, June 1956.

Conceptions of Mental Health

Mental health is an elusive but very necessary concept. In general, laymen and professional persons alike employ the term to refer to the absence of crippling "disease" and/or disturbed human relationships (14) associated with mental illness and borderline or ineffective functioning. But definitions which depend upon the absence of mental disease and which emphasize normality of behavior are not always helpful and may be dangerous. This objection is most pertinent in a study of mental health processes in the schools where a major concern is the education of effectively functioning individuals (59).

What positive criteria of mental health were available to guide research and professional people during the period under review? They ranged from a classified inventory of 2394 basic teachings compiled by Tyson (129) to a concept of efficiency advanced by Wishner (133). He conceived of efficiency as a function of the ratio of focused to diffuse anxiety, and of productivity or performance, indexing psychological health.

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A number of multidimensional approaches appeared. Eaton (30) evaluated judgment by clinical insight, ability to fulfil a social role, self-assessment in terms of well-being, and degree of conformity to group standards as being criteria somewhat different from statistical normality. Smith (112) warned that, for many human beings, individual adaptation to a particular life situation may be achieved only at the cost of personal integration. Psychological adequacy, he believed, could be indexed by measuring attributes, such as creativity, flexibility, self-acceptance, and effective intelligence, each in terms of criteria for distinctive cultural milieux. Lindeman (69) described the healthy man as a person who does not distort his life situation, knows that he never will be released from conflict, does not anticipate final solutions for difficulties, avoids either-or solutions, operates thru groups but insists upon the right of dissent, and maintains integrity in work and play and between means and ends.

Jahoda (58) concluded that a combination of three criteria was necessary for determining the mental health of an individual. One was active adjustment as distinct from inability to cope with or passive acceptance of environmental conditions. Another was personal stability where internal regulations, both physiological and psychological, remain intact along with the flexibility of behavior necessary for active mastery. A third was "correct" perception of self and the object world. Jahoda proposed that a crucial test for strength of a healthy personality occurs when a person is transported from one environment to another.

The organization of the remainder of this review posed a difficult procedural question. Was there any suitable way of conceptualizing the field which permitted the incorporation of a range of approaches by both medical and behavioral scientists? By school and any other interested people? We reasoned that in any burgeoning research area theoretical formulations based upon valid inferences from observations should be included with technically sound tests of hypotheses.

Finally we adopted the "organism-contexts-personality" schema set forth in an article by McGuire (75) and elaborated by Murphy and others (85). These authors were quite aware of biological variability as a source of individual differences. Nevertheless, they emphasized the importance of the timing of developmental processes, of variations in learning experiences, and of stresses imposed by different sets of cultural agents upon the personality formation and social behavior of the adolescents they studied. We reasoned that such a variance model not only would encourage research dealing with antecedent-consequent relationships but also would permit us to fit in many different approaches to the isolation and study of factors influencing individual mental health.

Human Organism

A large proportion of laymen and many professional people appear to believe that man can be understood in terms of the unfolding of a biological

endowment in a given environment. Changes in this view of human biology appeared during the period under review. For example, at a national conference on psychiatry and medical education (1), a strong case was made for extrabiological as well as biological influences. Preparatory reports for the conference criticized failures to take account of interpersonal and cultural influences upon man's development (including his bodily growth and physiological equilibrium).

Genetic and Biochemical Variability

A good deal of progress was reported in attempts to relate genetic material to orderly but very complex processes leading to the fabrication of an individual, to identify consequences of biochemical variability, and to produce model psychoses experimentally by hallucinogenic drugs. Tatum and Gross (124) provided a comprehensive review of work on gene action and differentiation; they indicated possible mechanisms by which changes in pattern of enzymic reactions could be affected by environmental as well as genetic events. Snyder (114) pointed out that the genetic potential of multifactoral human inheritance is subject to degrees of extragenic influences brought about by environmental events. His examples ranged from infection and trauma to subtle embryological, immunological, and psychological phenomena.

To follow up his proposals about psychological genetics in an earlier article, Cattell, Blewett, and Beloff (16) determined approximate nature-nurture ratios for 12 primary personality factors. They analyzed sets of responses to the *Junior Personality Questionnaire* from 104 identical twins, 64 fraternals, 182 sibs within families, 72 children unrelated but reared together, and 540 children in the general population. Of the 12 factors measured, five were judged to be environmental, four were said to involve "heredity" between families, and three were attributed to heredity.

Williams (132) added a paper on the implications of individual variability for law and science to his two books on humanics (study of human nature) and papers from the Biochemical Institute at The University of Texas. His thesis was that no clear-cut division can be made between "normal" and "abnormal." He believed that alcoholism and many other diseases would remain mysterious until individual variations in body chemistry were further explored. In Canada, Hoffer, Osmond, and Smythies (55) used adrenochrome (an oxidation product of epinephrine) to produce experimental psychoses in human beings. They reasoned that such a substance could be liberated in the human body during stress whereas none of the other substances used to produce psychoses artificially occur there naturally. Hoch (54) assessed the current status of studies of model psychoses which employ mescaline and other drugs producing disturbances of perception but not necessarily of thought (a major aspect of schizophrenia). Altho he could find no confirmation of Hoffer's work, he

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pointed out other promising findings despite some very evident differences between experimental and natural psychoses.

Nevertheless, Gerard (41) speculated that psychoses like schizophrenia may be primarily disturbances of units of the nervous system, genetically carried and biochemical in nature. He proposed that neuroses which involve stress, anxiety, and psychosomatic disturbances may be weighted more toward the physiological than the chemical and result from relations of the individual to his environment rather than his ancestors. But there were disagreements in the literature. For example, Hoagland (53) and his associates found that the adrenal cortex in schizophrenics was normal in resting states but deficient in response to stresses elicited in their laboratory settings. Whereas Gerard (41) pointed to energy-rich phosphates as influences upon awareness as well as upon responses of the brain, Hoagland considered that cumulative changes in tissue potassium accompanying a wide variety of stress (and an acquired refractoriness in the adrenal cortex) may be involved in the emergence of schizophrenic behavior. Either genetic deficiencies or psychological theories which emphasize the role of anxiety and other forms of emotionality in the genesis of schizophrenia would accord with the findings of Hoagland.

Stress and Psychosomatic Behavior

The general adaptation syndrome with its emphasis upon the pituitary-adrenal axis appeared to be replacing the emergency theory of emotionality with autonomic involvement and older conditioned-reflex formulations as a physiological model for psychosomatic medicine. Selye (108) summarized his work on stressor agents, adaptive reactions to stress, and disease processes. He emphasized topical stress with local adaptation syndromes and indicated that pathogenic reactions may follow inappropriate responses to such stresses. On the other hand, Holtzman and Bitterman (57) raised questions about a general factor of resistance to stressful conditions in a factorial study of sociometric, psychological, and laboratory variables. Relationships between different kinds of measures were either low or absent. They cautioned that peer ratings, perceptual responses, stress tests, conditioning measures, and *MMPI* scores may have left some possible common factors untouched. However, one might question whether their psychological approximations of stress situations actually were counterparts of what is encountered in real life.

Basowitz and his co-workers (5) reported a detailed cross-disciplinary study of 30 paratroopers undergoing training and 17 who refused to make the initial jump. They found evidence for the developmental origin of anxiety proneness and differentiated facilitating anxiety, related to shame, from disruptive anxiety traceable to guilty expectations of harm to self or parts of the body.

Earlier notions that a specific kind of personality might be found regularly associated with a special kind of somatic disease seemed to be

replaced by attempts to work out a chain of reversible links between somatic disorders and emotional strain. For example, Wolff and his associates (3) concluded that the common denominator in psychosomatic illness is the interpretation of an event as threatening and that protective reaction patterns involving bodily organs may continue long after the threat episode. Threat to the integrity and well-being of individuals was traced not only to the physical environment but also to the internal symbolic environment. Examples of symbolic processes were threats of danger arising from past experience, dependency feelings, and conflicts between drives. Kubie (64) pointed out that symbolic processes permit an interplay of meanings which begin internally with the "I" and extend to the object world of "not-I." He reminded his readers that Freud originally characterized an instinct as the index of a demand which the body as such makes upon psychological processes. To Kubie, the term *instinctual* was applicable to a biochemical source and a modifiable neural network which could be altered by social and cultural influences so as to form a time-binding, goal-seeking superstructure actively coping with (instead of passively accepting) symbolic representations.

The ability of the self or ego to receive external and internal stimuli and to cope with them effectively could be central to any conceptions of mental health. Menninger (78) distinguished minor stresses which usually are handled by relatively "normal," "healthy" devices of everyday life from greater or prolonged stress which excites the ego to initiate emergency regulatory devices; the latter he classified as exaggerations of normal functions. Blumberg, West, and Ellis (12), in their study of host resistance in cancer patients, found that the ability to use the typical mechanisms for avoiding or reducing excessive emotional stress was singularly lacking in the average cancer patient, particularly those with rapid growth and spread of tumors. In a comparison of patients coming promptly for or delaying cancer treatment, Cobb and her associates (19) noted that the primary psychological difference between members of the two samples was in their manner of coping with pervading fear and underlying dependency.

Transactional feed-back relationships between mother and child received some attention. For instance, Engel (33) recognized that vulnerability to psychological stress among children may be joined to phases of psychosexual development. As yet, he said, there is no established physiology of the crucial mother-child symbiotic unit nor of the development of object relationships. He concluded that very little is known of the physiology of separation, grief, and depression. Finally, he believed that stress associated with separation may be much more crucial than that associated with the fight-flight response, even in animal experiments. Sontag (116), reporting from the Fels Research Institute for the Study of Human Development, argued that psychosomatic illnesses in childhood largely were manifestations of unresolved tensions created by the frustration of dependent needs or of independent strivings. Not only did he recognize four kinds of parental attitudes and their somatic as well as psychological consequences

(which could be categorized as active or passive) but also he related them to variations in constitutional and developmental factors.

Patterns of Development

During the period under review, research on child and adolescent behavior continued to employ a developmental frame of reference but biosocial influences were given increasing weight. For example, Bayley (6) reconsidered methods of representing individual patterns of development with illustrations drawn from the Berkeley Growth Study and the Guidance Study of the Institute of Child Welfare at the University of California. She believed that such data provided a frame of reference not only for evaluating growth and differentiation, but also for assessing environmental factors and explaining emotionality and various aspects of personality. In addition, Bayley (7) concluded that intellectual growth depends upon emotional climate and material environment as well as upon the capacities for development possessed by a given child. From the Growth Study and other data, she suggested that the concept of a constant IQ should be revised and that the age of highest intellectual capacity is later than originally thought.

A number of reports appeared from the longitudinal study of 16 males and 17 females born in 1932 carried on by the Committee on Human Development of the University of Chicago in Prairie City (Elmtown, Jonesville) from 1942 until 1950. More (82) found that sex differences in timing of biological maturation, concomitant emotionality, and acquisition of new patterns of behavior followed markedly different paths for boys and for girls. In the main he agreed with Schonfeld (104) that emotionality associated with pubescence seems to be related to psychosexual development and to social pressures of cultural patterns rather than to hormone stimulation. Schoeppe, Haggard, and Havighurst (103) analyzed the case study data of 15 girls and 15 boys of lower-middle and upper-lower family backgrounds. They showed that adolescents whose parents exercised severe control in their formative years were hindered in the accomplishment of developmental tasks. Factors which were most favorable for the necessary mastery of impulsivity and acceptance of self were identified for boys and for girls. Milner (80) concluded that the boys' major problem at 15 years of age was impulse control whereas girls, already having learned suppression, focused upon conformity to obtain approval. In another paper (81), Milner argued that the inculcation of anxiety in individuals for socially adaptive ends often leads, particularly when child-rearing is interpreted as a moral duty by parents, to behavior which is nonadaptive or neurotic in character.

Developmental psychologists moved out from the simple maturationist point of view to formulate and test theories of change in personality and behavior thru time. Wright (134) joined with Barker in a study of the psychological ecology of the Midwest and its children. They showed that

psychological development occurs in and thru face-to-face social inter-action with child and adult associates. Stendler (118) set out to identify critical periods in socialization and, like Engel (33) and Sontag (116), she examined dependency in the mother-child relationship. In a study of 20 six-year-olds rated as overdependent and an equal control sample, she (119) inferred that overdependency was a consequence of overprotection and maternal domination. Critical periods occurred at the time when the child begins to test out the mother to see if he can depend upon her (beginning at about nine months) and again at the time he is expected to be independent in culturally approved ways (from two to three years).

Other instances of departures involved a search for principles joining early childhood conditions and later social behaviors of children. Gewirtz (43) using Skinner's model of operant conditioning, proposed to investi-gate the laws characterizing emotional dependence in childhood as a follow-up on his studies of attention-seeking behaviors. He would catalog instrumental behaviors, reinforcers, and object persons (as a function of age), and then examine different emotional dependence patterns in the human caretaking situation. On the other hand, with a theory of social learning in dyadic situations to account for processes of behavior change, Sears (105, 106) began a program to discover principles useful in predict-ing future behavior which he illustrated with an experimental study of the effects of frustration and anxiety upon fantasy aggression.

Behavioral Contexts

The theoretical contributions and research reports reviewed in this section illustrate various approaches to a two-fold assumption: (a) Learn-ing experiences of a developing human organism interacting with cultural agents and an object world in several crucial social-cultural contexts can be identified and related to one another (75); and (b) variations in social learning within these contexts of human experience have a significant bearing upon the behavior of a human being, and upon changes in his self concept and somato-psychological controls (76, 77, 85). Some of the references in the preceding section of the chapter and others in sections to follow could be placed among the examples exhibited here.

Family and Interpersonal Competence

Three recent contributions bearing upon family research were significant because they tied together ideas and data from earlier work in such a way as to open up new possibilities for investigations of influences upon mental health. A report (23) prepared by Florence Kluckhohn and Spiegel devel-oped a scheme for identifying components of the system of values to which a family is oriented, starting from earlier analyses by Clyde Kluckhohn and by his wife (95). To illustrate processes related to psychological strain and mental health, they discussed instances of integration and mal-

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integration in Spanish-American and American middle-class family patterns.

Parsons, Bales, and their contributors (94) postulated that family interaction leads inevitably to a process of "binary fission" in which a child's roles are progressively differentiated: Parsons began with the mother child-identity and traced bifurcations thru four discontinuous phases. The patterns diverged according to parental expectations for each sex—a "big boy" acts in terms of an instrumental orientation and a "big girl" in terms of an expressive one. Parsons and Bales associated compulsive and psychopathic behavior with the conformity-alienation problem of early socialization (94). In addition they proposed explanations of the origins of paranoid and schizoid tendencies as well as manic behavior and depression.

Proposals for a reorientation of family research were made by Foote and Cottrell (38). They rejected the concept of "adjustment," which assumes a conflict between personal identity and interpersonal relations, and preferred "competence" which refers to a capacity or process manifested in observable behavior. Their formulation of the nature of interpersonal competence provided consequent variables (with a mental health orientation) for the study of outcomes of family value systems and socialization processes considered in preceding paragraphs. They defined six components of interpersonal competence—health, intelligence, empathy, autonomy, judgment, and creativity—and developed a series of hypotheses about conditions affecting the optimal development of each component in order to encourage experimentation.

A number of life-situation inquiries into relationships between family and personality variables were reported. Henry and Warson (52) illustrated a theory of multiple family structures and their influence upon psychic development with the case of an eight-year-old girl living with her relatively uninterested mother, father, a younger sister, and a dominant maternal grandmother to whom the girl revealed hostility in doll play. Interactional analysis of another family on weekly interviews over three years by Henry (51) and psychiatric interviews supplemented by psychological tests with members of 20 families by Fisher and Mendell (37) provided evidence for the transmission of neurotic patterns over two and three generations. Comparing mothers of 25 hospitalized young male schizophrenic patients with controls, Prout and White (97) inferred that the former lived out their lack of being a person in their own right in the lives of their stand-in sons. Giffen, Johnson, and Litin (44) confirmed the Szurek-Johnson hypothesis that delinquent behavior in some children represents a defect in superego or conscience which is transmitted to the child by unconscious approval of a parent who receives vicarious satisfaction in the child's disturbed behavior.

Some child psychologists were concerned about the effects various family and sibling characteristics have upon parents and upon children. For example, Dameron (25), in a study of the development of self-restraint in children, found some differences between the training given by middle-

and lower-class mothers and in the degree of achievement reported. Lasko (65) analyzed the behavior of parents toward 40 pairs of first and second children. She located some differences in parental behavior but recognized a tendency toward consistency, with closely spaced children treated more advantageously. In a carefully planned research program at Chicago, Koch (62, 63) investigated the influence of sibling characteristics upon children's attitudes toward adults and upon a number of personality attributes. Her experimental design provided a sample population of 384 girls and boys in three sib-spacing levels and two ordinal positions with sibs of the same sex and other sex, all five- and six-year-olds, from two-children families. Consequently she had 24 matched groups of 16 children each. Women teachers were trained to use rating scales taken from the *Fels Child Behavior Rating Scale* and the *California Behavior Inventory for Nursery School Children.* Since interactions were significant in the analysis of variance for various attitudes, Koch warned against sweeping generalizations about the effects of birth order, sib's sex, age of child, or age difference between siblings.

Conflicting findings were obtained in various studies of methods of rearing children and their consequences in several kinds of families. Sewell (109) questioned the assumed one-to-one relationship of traits to infant discipline on the basis of findings from personality questionnaires administered to 162 farm children. Sewell, Mussen, and Harris (110) grouped child-training practices into seven clusters by factor analysis and concluded that there was little evidence of a pervasive attitude such as acceptance-rejection. Later research also contradicted some of the conclusions of the Davis-Havighurst comparisons between child-rearing practices of middle- and lower-class mothers reported in 1945. For instance, Maas (71) inferred a greater psychological openness in middle-class families with less dependency upon age-mates and a wider range of relationships in the peer group. Nevertheless, he agreed that lower-class children experienced greater social freedom and expressed more overt physical aggression. From interviews with 198 upper-middle and 174 upper-lower mothers of kindergarten children, Maccoby and her co-workers at Harvard (74) reported evidence indicating a tendency among the higher status mothers to be more permissive and less severe in their child training than upper-lower mothers. Havighurst and Davis (49) responded by pointing out areas of agreement and drew attention to ways in which the Harvard and Chicago samples were not strictly comparable. Another matter to be settled was the unknown extent to which mothers responded with "expected" and "appropriate" answers to questions of structured interviews and actually revealed themselves in either focused or unguided interviews.

Age-Mates and Personal Identity

The adolescent world with its culture and potential impact upon personality formation was recognized explicitly in sociological literature 20

years ago by Reuter. About the same time, Tryon explored adolescents' assessments of one another as part of the California Growth Study of Adolescents. Subsequently, with others at Chicago, she started to map out child and adolescent peer groups with sociometric methods and to study influences of peer cultures upon the personality development of girls and boys by self-report and projective technics. Not much later, Parsons provided a theoretical basis for work at Harvard when he considered influences of the youth culture upon age and sex roles. More than 10 years ago, McGuire began to formulate and test hypotheses about the antecedents and consequences of age-mate acceptance, avoidance, and rejection. With Clark, as reviewed in some detail in the second chapter of the REVIEW of February 1954, he worked out relatively objective sociographic technics for representing the structure of age-mate societies and derived indexes of peer status to estimate acceptance and avoidance among girls and boys.

The idea that personal identity may be, at least in part, a function of experiences in age-mate contexts supplementing social learning in the family (70) received increasing attention during the period under review. For example, Florence Kluckhohn and Spiegel recognized that the adolescent peer group usually is the mechanism thru which workable solutions are found for the dilemmas posed by the discontinuity between childhood training and adult expectations (23). Sullivan's teachings (122) about children identifying with compeers in the juvenile era, same-sex intimacy and the consensual validation of personal worth in preadolescence, and the "stutter" in developmental progress between the boys and the girls in an adolescent-age community became more widely available. As a consequence of his work with adolescents, Ausubel (4) was struck by their concern about acquiring primary status in a peer group which provided a social identity beyond the family.

In their outline of a conception of personality, Murray and Kluckhohn (86) concluded that hostility between adults and adolescents was due in large part to conflicting cultural patterns which arise and are transmitted at the adolescent level. Their observation that value standards prevailing in a young person's family quite often are different from those in the families of his associates was confirmed by McGuire's finding (75) that among the "wheels" of dominant peer cultures in age-mate societies there usually were a number of girls and boys from families of conforming, alternate, and deviant life styles. Cohen (20) described "subcultural juvenile delinquency" in terms which paralleled the account of deviant peer cultures of Murphy and others (85). The delinquent subculture, Cohen argued, sets up status criteria which can be met by the boy who is unable to compete with age-mates in middle-class dominated institutions; it equips him to retaliate against this "normal" society which makes him feel ashamed, inferior, resentful, and hostile. On the other hand, the "myth of adolescent culture" was attacked by Elkin and Westley (32) who based their findings on interview and case study data gathered about 40 adolescents in a well-to-do suburb of Montreal.

During the period under review, Tuddenham (127, 128) reported on his studies in reputation of 1439 children in the first, third, and fifth grades at Berkeley, California, who responded to the *Reputation Test* as a part of the Guidance Study. Altho his technic did not permit him to trace the age-grade development of peer-group relationships, he found typical boy and girl behaviors which reflected sex roles; he concluded that clear-cut patterns of characteristics associated with popularity were present as early as the first grade. The clusters of attributes were more clearly separated and defined in each successive age-group studied with a sex differentiation of peer group social values from the third to the fifth grade.

The first comprehensive report of the Textown Study of Adolescence, which examined the antecedents and consequences of age-mate acceptance, avoidance, and rejection, was written by McGuire (76). He attached a bibliography of work so far published by associates in the project and indicated that further materials were available from the Laboratory of Human Behavior at The University of Texas. Each year since 1950, socio-graphs were constructed from nomination data and indexes of peer status were computed for the girls and boys in three to four age-grades. The sociographs identified those who were accepted, regarded ambivalently, generally avoided, rejected, or isolated by male and female age-mates among the 90 to 180 adolescents identified with each age-grade. From the detailed findings of a series of studies, he inferred that peer acceptance was a function of social-stimulus value and degree of reality orientation (extensionality-intensionality) rather than family background for those who remained in the middle-class oriented adolescent societies centering about Textown High. Value standards and criteria of acceptance-avoidance were not the same for girls as for boys and varied from one age-grade to another. Later findings from the Textown Project, with the statement of a theory-research approach and methodological notes, were incorporated into a report upon a mental-health-in-education research program (77).

The impact of the school context, where a young person encounters a succession of new authority figures who are relatively impersonal and who expect and reinforce new kinds of behavior, was recognized in a variety of ways. Sullivan (122) believed that the school society rectifies or modifies a great deal of the unfortunate direction of personality development within certain family settings. McGuire (75) pointed out that when a boy or girl is confronted by conflicting value standards and expectations of close-tied parents, by age-mates who have no authority but who can accept or avoid, and by impersonal cultural agents, such as the teacher or counselor, a potential stress situation appears which may have far-reaching consequences on mental health. Faced with this dilemma, Cohen and others (21) argued, a lower-class boy may strive in school to learn middle-class norms (and to be accepted by age-mates), or he may in some way excuse his failure and fit into a law-abiding lower-class status, or he may respond with anger and aggression expressed in ways middle-class people label as juvenile delinquency.

There were a few experimental attempts to explain or change the impact of the school context with its relatively impersonal expectations upon girls and boys. For instance, Levin (66) designed an experiment to estimate the influence of restraining and permissive classroom control by kindergarten teachers upon children's fantasy aggression in doll play. This pilot study would lead one to infer that the relationships teachers establish with their pupils have ramifications beyond the classroom.

Other inquiries represented life-setting rather than experimental research. Talbot and Henson (123) reported social-work treatment of internal conflicts in the cases of five adolescent boys who protected themselves by the defense mechanism of ceasing to learn. Justman (60) could find no evidence of differences in personal and social adjustment between 95 matched pairs of intellectually gifted pupils (IQ of 130 or more) drawn from special-progress and normal-progress classes of nine junior high schools. When he compared a sample of eleventh-grade pupils with three control samples, Robinowitz (99) found that boys and girls who achieved beyond expectancy were characterized by ambivalent evaluations of their family and of acceptance by age-mates. In the Preventive Psychiatry Project at the State University of Iowa, Levitt (68) concluded that rigid, moralistic punitiveness exhibited by many elementary-school children in Grades IV, V, and VI might be reduced by means of school curriculums and other planned learning programs designed to bring about an increased understanding of causality in behavior. Sonke (115), in the first of a number of similar articles, described experiences in theme writing on self-report topics thru which the teacher came to know her pupils and they came to understand as well as accept themselves and one another.

Further light was thrown upon the nature of intellectual ability, which some school people still trace to the unfolding of genetic biological endowment and to family lines. To supplement the study, by Eells and others (31), of cultural differences in children's responses to group tests of intelligence, Haggard (46) designed a careful investigation of the influence of family social status, practice, motivation, form of test, and manner of presentation upon the performance of 671 children who responded to tests under five conditions. He concluded that adequate measures of mental function require evaluations of experiential and noncognitive factors and not merely a revision to remove the middle-class bias of present tests of intelligence. On the basis of work at McGill University, Ferguson (36) inferred that different environmental demands lead to the acquisition of different patterns of perceptual, motor, verbal, and reasoning abilities. He suggested that thru control of environment and educative process new patterns of ability can emerge.

Some attention was directed to the proposition that achievement in schools and colleges depends upon something more than ability as measured by presentday tests. Slabodkin and McGuire (111) demonstrated variations among cognitive, cathectic, and sensory-motor modes of motivational orientation between girls and boys in the ninth grade of a junior

high school when their week-long behavior journals were evaluated by six judges. Their academic achievement appeared to be a function of degree of cognitive motivation rated in the journals, relative acceptance by classmates, and comparative absence of sensory-motor motivation, with factors, such as performance on a test of intelligence and index of family value orientations, valuable only as correction elements in the regression analysis. With a sample population of 213 college women and 199 men in their freshman year, Brown, McGuire, and Holtzman (13) found that scholastic achievement depended not only upon potentialities represented by measures of scholastic aptitude but also upon probabilities of translation into academic performance measured by a test of academic attitude and by an index of acceptance by peers. Their data and findings indicated that effective functioning of the individual in a school or college context involves a complexity of interrelated factors yet to be described and explained.

Social and Cultural Influences

A number of theories emerged during the period under review which could be exploited by research people interested in social and cultural influences upon mental health. Dai (24) saw human personality as an organization of selves or self-concepts each resulting from the interaction between the individual and a specific sociocultural environment. Among others, Newcomb (88) had much to do with the theory of attitude development as a function of reference groups, partly as a consequence of the Bennington Study of young college women. Merton and Kitt (79) added the concept of relative deprivation which explained, among other behaviors, why certain individuals appraise themselves in terms of significant others rather than recognize their own abilities and the objective situation (Jahoda's "correct perception"). Parsons and Shils (95) derived a pattern-variable scheme to explain discrete choices every person makes before acting and subsequent habits of choice which become a part of the personality. In social interaction, the five pattern variables defined role alternatives; and, on the cultural level, they applied to normative aspects of value standards. Following Florence Kluckhohn, Du Bois (29) defined American middle-class value premises and identified three focal values (material well-being, conformity, and effort-optimism). Goldschmidt (45) held that American culture is built upon mobility which undermines the tendency toward established group identification, so that present status compared with that of the family orientation becomes a method for self-evaluation.

Some of the research reviewed earlier, especially that upon social-class differences in child-rearing practices, could be considered as inquiries into social and cultural influences upon mental health. In addition, Hollingshead and Redlich (56) showed that there was a higher incidence of neuroses in their social Classes I and II, whereas psychoses had a higher percentage of occurrence in Classes IV and V. Another analysis of data

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from the same research program established the probability of relation-
ships between status striving, anxiety, and mental health. Thru detailed
interviews and *TAT* stories told by a sample of business leaders from their
larger research population, Warner and Abegglen (130) inferred that
mobile individuals seldom became deeply involved with people and truly
were "men in motion." Men who expended an "enormous concentration
on their careers," however, paid the price when they were put in limited
positions and became listless, apathetic, defeated persons. McArthur (72)
provided evidence for a psychologically distinct "upper-class personality"
fitting value profiles originally formulated by Florence Kluckhohn when he
confirmed 15 predictions about short stories based on *TAT* cards by 201
public-school (middle class) and private-school (upper class) freshmen
at Harvard University.

A cross-cultural comparison was reported by Opler and Singer (91),
who worked with 30 Irish and 30 Italian schizophrenic patients in four
hospitals, employing psychiatric, anthropological, and psychological meth-
ods. Differences in the psychogenetic and psychodynamic patterns of the
two sample populations were attributed to the family systems, the values,
and the symbols of the two cultural groups.

Personality and Behavior

At least three theory-research approaches are represented in attempts to
describe, explain, predict, and sometimes control the psychological func-
tioning of an individual by educational or therapeutic means. Some persons
are psychoanalytically oriented, others are students of human motivation
and learning, and there are those who have a more or less cognitive
outlook.

Psychoanalytic Formulations

In an important editorial, Bettelheim (10) took the position that some
parents and educators have shirked their adult responsibility to educate
children because of a fear that thwarting freedom of expression and
development may lead to "bad" consequences for a child's mental health.
From his own work and the experience of others, Bettelheim held that the
chief task of the child thru early adolescence is to find and define his own
personal identity within his particular society. Bettelheim endorsed Erik-
son's view (34) of the healthy personality and put the idea of "eight
stages of man" in an educational context with attention upon the mental
health of the individual as a social being. Combining Erikson's categories,
Bettelheim reasoned that teachers as well as parents have the responsibility
of guiding a young person to the acquisition of autonomy and personal
identity thru fostering initiative and industry. Then, Bettelheim concluded,
a young person can afford intimate living together with others and achieve
a sense of personal integrity.

Selections from a wealth of materials left by Sullivan (122) concentrated upon the manner in which the interpersonal field, beginning with a child's personalization of "good" and "bad" mother, influenced variations in psychosocial (rather than psychosexual) development and self-systems among young people. Rapaport's conceptual models of conation, cognition, and affection (98) cast further light upon the functions of the ego. Conceptions of anxiety and mechanisms, such as repression, regression, projection, and sublimation, were restated clearly by Hall and Lindzey (70: 143-80). Beginning with a construct, "cathexis energy," Colby (22) challenged the tripartite id-ego-superego conception. He proposed a cyclic circular model to represent activation of drives, operation of defense mechanisms, triggering of action, and arousal of affect.

Analytically oriented research was largely clinical in nature. For example, Bender (8) took issue with Freud's theories of aggression, hostility, and anxiety when she analyzed data on the antecedent psychological situations of 260 children at Bellevue Hospital from 1935 to 1953. Sontag (117) set forth his conceptions of the etiology and psychodynamic mechanisms involved in delinquent behavior. He cited cases of boys whose ego defenses of hostility acted out in extralegal ways could have been prevented, or treated, by the provision of a warm, authoritative, nondelinquent figure (male, if possible, for boys). Blos (11) described "prolonged adolescence" observed among young men, 18 to 22 years of age, who identified with mothers and relinquished competition with fathers. Cohen and her associates (21) traced manic-depressive psychoses of 12 patients to anxiety-provoking misperceptions and feelings of loneliness acquired thru the parent-child dynamics of prestige-seeking minority-group families.

Motivation and Learning

Another group of behavioral scientists preferred to translate psychodynamic concepts of personality into psychological variables concerned with motivation and learning. Intervening variables were indexed by antecedent and consequent behavior which could be observed under conditions and with operations that could be repeated by others. White (131) clarified their point of view in a pithy review of literature bearing upon mental health but warned against sacrifices made for quantification. In general, he argued that behavior disorders have to be conceived as consequences of learning when they are not determined by abnormal conditions in the brain (which were considered in earlier parts of this review). He believed that Dollard and Miller (28), in 1950, took a major step forward in the aforementioned translation when they applied reinforcement theory to the study of neurotic behavior. Briefly stated, their position was that major disorders of behavior often were overgeneralized and overlearned patterns of reaction, acquired thru social learning, which persisted under inappropriate conditions.

Reinforcement theory, with the idea of drive in the organism and the strengthening of cue-response connections thru reward, was not the only model of motivation and learning advanced or adopted by students of human behavior. Harlow (48) pointed to the "insatiable curiosity-investigatory motivation of the child" in applying to human beings his experimental evidence from primate studies favoring "external" as well as "internal" drives such as need reduction. To explain achievement motivation in their human subjects, McClelland and his co-workers (73) preferred an affective-arousal model wherein a motive is the learned result of pairing cues and effect; behavior is controlled more by anticipation than by stimulus input. In a reconsideration of his two-factor theory of learning which he had applied to analyses of neurotic behavior, Mowrer (84) concluded that habits are acquired thru drive reduction. On the other hand, he reasoned that fears are learned by drive induction so that punishment leads to fear arousal, conflict, and modification of response.

One rather loosely tied group of research people tested hypotheses linking earlier childhood experiences evolving from cultural demands and parent-child relationships with present observed behavior and conditions for subsequent learning. Sears (106) provided a theoretical framework for the study of personality and social behavior which differentiated learning from ongoing action. Instead of a monadic explanation, he emphasized a dyadic sequence with Alpha's (the learner) anticipatory responses and instrumental acts guided largely by expectancies of Beta's (the cultural agent) supportive behavior in subsequent environmental events leading to goal responses. Child (17), in a succinct article on socialization, described "systems" of behavior identified in cross-cultural studies with Whiting and others. The seven systems—oral, excretory, sexual, aggression, dependency, achievement, and affiliation or affection—were regarded as convenient labels for patterns of responses which had antecedents in child-rearing practices and which seemed to share a common drive or goal.

Theoretical formulations were paralleled by programs of experimental and cross-cultural research with children. For example, Sears and his associates (107) studied child-rearing antecedents of aggressive and dependent behavior exhibited by 19 preschool girls and 21 boys from middle-class families. In this research at the Iowa Child Welfare Research Station, verbal reports of mothers provided material to be rated for severity of infant and current frustration, maternal nurturence, and the mother's punitiveness toward the child. Then ratings for each child were related to present aggression and dependency measured by direct observation of behavior, teachers' ratings, and doll play. From his experiences at Iowa, Nowlis (89) contributed a thoughtful paper on research operations with special reference to the development and modification of motivational systems. Levin and Sears (67), in one of a number of experiments from the Laboratory of Human Development at Harvard, related identification

with parents to the doll-play aggression of 126 boys and 115 girls. Boys who had distinctive cues for male aggressiveness from identification with fathers who usually punished them showed the highest frequency of aggression. On the other hand, only girls who had an aggressive role model in mothers who punished them severely, yet with whom they identified, exhibited the same degree of aggression observed in the boys.

Several other investigators approached the study of complex social motives either with the foregoing S-R antecedent-consequent model or with an R-R analysis of responses in two or more situations. McClelland and others (73), for instance, reported a study of 30 college men in which aspects of parental child-training practices, rated by the subjects and by a psychiatrist after extended interviews, were correlated with frequency of achievement-related themes in *TAT* stories. High need-achievement was related to an "individualistic" family pattern where early independence activity was fostered; low need-achievement, on the other hand, was connected with a protective family syndrome. French and Chadwick (39), who earlier had studied achievement motivation among airmen, found that subjects with high internal affiliation motivation were more responsive to cues of external affiliation under aroused conditions and tended to estimate popularity more accurately than others among 151 men in six flights. Such work emphasized the necessity of further inquiries into the nature of the arousal system and conditions under which motives operate in the study of factors influencing mental health.

In a thought-provoking book, Olds (90) considered the learning of motives, the effects of rewards, and the establishment of internally learned Gestalts in an attempt to explain the control structure which smoothly converts shifts in environmental stimulation into changes in behavior. In intrapersonality action systems, he believed, motivation is provided by curiosity when something is not explained and by goals when an object system is engaged. He differentiated between object systems, on the one hand, and temporal systems, on the other hand, with dependency acquired in the mother-object system as an example of the latter.

Cognitive Approaches

A number of students of human behavior who cast light upon factors affecting mental health assumed that cognition is an essential element of any personality organization interposed between sources of stimulation in the behavioral field and observed behavior. Altho Tolman rephrased his psychological model (95: 279-361) in terms of principles of performance (125), he retained three sets of variables representing dimensions of personality organization. His intervening variables (a discrimination system, a belief-expectancy system, and a drive-incentive-value system) were somewhat parallel to Jahoda's correct perception, unity of personality, and active adjustment in mental health (58).

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A much simpler "self theory" was adopted in the study of changes in the self and ideal concepts of clients in relation to the process of psychotherapy by a research group reporting in a book edited by Rogers and Dymond (100). They relied upon self and counselor reports to depict conflicts between the perceived self and the ideal self. Hallowell (47), who merged anthropological observations with psychological technics and insights, discussed the self and its behavioral environment in terms of three questions posed for each human being during maturation and socialization: Where am I? Among whom do I move? What are my relations to things? Consequently he depicted personality organization and behavior as cultural products in terms of self, object, spatio-temporal, motivational, and normative orientations.

Attempts to identify and validate more or less inclusive concepts of personality and behavioral organization continued. For instance, Berkeley (9) viewed threat to self-esteem as a special case of threat to the integrity of the organism. Among 31 male subjects, those with the widest divergence between goal and performance on the *Rotter Aspiration Board* showed the greatest response to stress during the test period in terms of adrenocortical activity indexed by production rate of 17-ketosteriods.

The idea of "authoritarian" value systems inculcated in the family encouraged a wide range of studies during the period under review. In the literature which could be cited, perhaps Frenkel-Brunswik's illustration (40) of the origins of ethnic prejudice as well as patterns of social outlook and cognitive rigidity in the case of Karl came the closest to an individualized representation of actual psychodynamics. On the other hand, the concept of an "authoritarian personality" and the F-scale underwent a good deal of criticism such as that in a book edited by Christie and Jahoda (18). Another construct was the "alienation syndrome" which involved egocentricity, distrust, pessimism, anxiety, and resentment in a study by Davids (26) relating such behavior to cognitive processes.

Since accurate perception appears to be one accepted criterion of mental health (58, 69), experiments involving distortion of judgment and modification of attitudes promised to throw light upon conditions which alter behavior. Asch (2), in an experiment with 87 subjects, showed that independence and yielding in public-judgments of perceptual relations were a function of the stimulus situation, the group forces, and the character of the individual. Helson and others (50) found that expressed attitudes toward statements dealing with war and peace depended upon the influences of other people (simulated group conditions) and personality characteristics such as ascendance-submission. Thus they demonstrated that expression of attitudes followed the adaptation-level paradigm in that behavior of the 45 subjects represented the pooled effect of three sources of variance: immediate stimuli, background factors, and residual effects of prior experience.

In a presentation of role theory, Sarbin viewed self as a cognitive structure and advanced a self-and-role-in-interaction thesis (70). Hypoth-

eses derived from his theoretical position were tested in a study of intra-personal factors in delinquency with 41 second or third offenders and 49 control boys by Sarbin and Jones (101). A series of perceptual-cognitive tasks differentiated the psychopathic delinquents from the nondelinquents. The former appeared to have a self structure fixated at a point in the maturation-enculturation process where immediate tension reduction was the focus of most behavior. In contrast, Orzeck (92) provided evidence for a theory of two selves (or dimensions of self) with an "accept-reject mechanism" underlying role behaviors of individuals interacting with other persons. He demonstrated a "flip" from a reality oriented to a defensive orientation and return for 16 of 20 male and female subjects carried from a prehypnotic state, thru hypnotic depression, then hypnotic elation, to a normal waking state.

Experiments involving role conflicts led to the conclusion that resistance to a set of normative pressures was a function not only of the personality organization of an individual and his recognition of requirements of the situation but also of his adherence to the value standards of some other reference group. An early study of 648 undergraduate students at Harvard and Radcliffe by Stouffer and Toby (121) provided a model for stories posing conflicting role obligations to a friend and to more general expectations; the responses were analyzed by Guttman's scalagram method. On the other hand, Getzels and Guba (42) were concerned about the actual conflict between two roles, for example, officer and instructor, which their subjects were expected to assume. They found differences in responses to the Guilford-Martin inventories, the E-scale and F-scale, and Rosenzweig P-F scores between conflict-prone and conflict-immune individuals but made no provisions for taking account of the value standards of reference groups.

Evidence began to accumulate that, instead of being fixed during early years, both mental function and personality organization could change during adolescence and adulthood. Bayley's findings (7) from the Berkeley Growth Study of unexpected increments in intelligence were cited earlier in this review. Kelly (61) compared changes over nearly 20 years in the responses of 446 husbands and wives in five tests which provided scores on 103 variables. Altho he found evidence for considerable consistency in several of the personality scores, there were measurable changes in all variables. Changes were shown to be relatively specific in nature and had little or no relation to known forces in an individual's immediate social environment. In a similar vein, Morris, Soroker, and Burruss (83) provided data which raised questions about early diagnosis and the inevitability of mental illness. Their subjects were 54 adults who had been classified 16 to 27 years previously as internal reactors (shy, withdrawn, anxious, or fearful behavior) presumbly predisposed to schizophrenia. Two-thirds of the subjects were found to be "satisfactorily adjusted," one-third were "marginally adjusted," and only two were "sick," one as a schizophrenic in a mental hospital. The spouse, in many instances, was a more aggressive,

outgoing individual. In general, the individuals studied continued to be quiet and retiring with positions of the sheltered and protected type to complete their sense of security.

Research Methodology

Two trends in the design and execution of research concerned with human behavior represented in many of the references cited earlier in this review were stated explicitly by Travers (126). First, he noted a change from studies of concomitant variation to an emphasis upon the formulation of a body of knowledge which has structure and the use of dependency or variance analysis which seeks to establish functional or antecedent-consequent relationships. Second, he observed a shift from a belief that variables exist to be discovered and measured to the position that stimulus, intervening, and response variables are convenient methods of description invented by scientists to permit reference to and tests of functional relationships. In addition, Smith, Bruner, and White (113) illustrated the strategy of discovery and conceptualization in their study of the opinions and values held by 10 men thru interviews and the "blind analyses" of *Rorschach* and *TAT* records. For example, they pointed out the inadequacy of current conceptions of ego-defense which leave out an account of a wide variety of tactics employed by "normal" individuals.

With regard to projective methods, Schafer (102) showed that clients constantly shifted the amount of intellectual control they exercised in responding to *Rorschach* cards. Consequently he recommended that a knowledge of age, sex, cultural background, occupation, self concept and other clues to ego identity be utilized to change the shading of interpretation. Eron, Sultan, and Auld (35) demonstrated the reliability of scales and checklists employed to analyze thematic apperception technic (N-TAT) responses of 100 submariners for emotional tone, outcome, themes, level of interpretation, and perceptual distortions. Phillipson (96), in England, originated the *Object Relations Technique,* recently made available in the United States, wherein a subject tells stories based on three series of four pictures each and a blank card. Each series presents the main object-relations situations; namely, a one-person, two-person, three-person, and a group meeting. The three series differ in degree of reality content and context and in addition some of the pictures are colored and others are achromatic. Davids and Murray (27) reported their preliminary appraisal of an auditory projective technic, *The Azzageddi Test,* which may become available in 1957.

Q-methodology, originated by Stephenson (120), underwent a good deal of criticism since its appearance, especially in the form employed by Rogers and Dymond (100) and their associates for the representation of the self concept and the ideal self. Butler and Fiske (15), however, supplied a convincing rationale for the concept of a metric within persons, in contrast to conventional metrics upon which both persons and items

are scaled. Moreover, they regarded a Q-distribution as a set of ranks with an arbitrary number of ties which could be correlated, by use of the tau rank-order coefficient, with other Q-sorts to approximate a matrix of intercorrelations. McGuire and his associates (77) employed structural Q-samples to represent relationships of variables to be considered in the study of dimensions of mental health. They reasoned that a set of Q-values represented a subjective metric obtained by operations which required each subject to make discriminations among self-reference statements and placement of the Q-items relative to one another. Consequently they believed that analysis of variance in the Q-values would identify influences operating between sample populations of persons as well as within the self-representations of respondents.

One other promising technic was Osgood's "semantic differential" in which various objects of judgment, sources, and concepts were rated on seven-place scales identified by pairs of polar terms. These polar continua, defined by terms such as "good-bad," "rugged-delicate," "fast-slow," were regarded as coordinates of a "semantic space" to which subjects responded in terms of a frame of reference which they "carry about," according to Osgood and Suci (93). By means of factor analysis, the two authors found that the polar continua represented evaluative, potency, and activity variables in the behavior of respondents, the foregoing examples being illustrations of each mode. Bellamy showed that, over and above intra-individual error and inter-individual differences, semantic valuations vary not only with regard to the three meanings of polar continua but also with reference to the objects of evaluations and the attributes describing samples of persons responding with the semantic differential (73).

Concluding Remarks

A great deal of research upon factors influencing individual mental health, including some of the work cited in this review, was made possible by the activities of and grants from foundations and government agencies. A bulletin describing the research, training, program development, and public education operations of the National Institute of Mental Health (87) and its installations at Bethesda, Maryland, indicated the increasing scope of the government-sponsored program. In addition to projects at Bethesda, NIMH research grants to qualified investigators in universities and other research centers were made up to December 1955, for 11 completed and 22 ongoing projects either concerned with school children or related to the school setting.

The Joint Commission on Mental Illness and Health was made possible by a joint resolution of the 84th Congress (Public Law 182) approved on July 23, 1955. Early in 1956, the members of the Joint Commission (59) with a staff directed by Ewalt prepared a descriptive model of mental health processes in the nation and a paradigm for the study of schools

and mental health. As indicated in the plan of this review, the latter model conceived a pupil entering school processes as coming with his own biology, his life history so far, and a level of effectiveness influenced by cultural environment, family, and early peer-group experiences. Then, they asked, what dimensions of authority, peer, and formal learning relationships influence both the increased and decreased effectiveness of young persons in elementary and secondary schools and in colleges?

The present review has been designed to represent the current state of our knowledge and research approaches bearing upon individual mental health. Some explicit and implicit questions have been answered, at least in part, yet much remains to be done. We still have to find many parts of the puzzle of mental health and illness among human beings. Do we really have any conclusive evidence concerning the relative importance of biological variation, parental attitudes and parent-child relationships, age-mate acceptance and peer-group experiences, and the more remote authority figures in school, church, and elsewhere in the community? Do these or other influences upon individual mental health vary according to the stages of physical, libidinal, or ego development? The young person's attitudes toward significant parental, peer, or impersonal figures? From one kind of sample population to another? Do we really understand the nature of personality organization, the range of psychodynamic patterns among effectively as well as borderline or ineffectively functioning young people, or the possible relationships of personality to behavior? As yet there are few significant inquiries into school-community factors, the form and flavor of school organization, the teachers and/or special service persons and their personalities, as all these operate in classrooms and offices to influence the mental health of young persons. Apparently there is much to be done.

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CHAPTER IV

School-Community Programs

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THE period under review reflects increased general interest in mental health problems as well as effects of the activities of the National Institute of Mental Health and the several state mental health authorities. In the consideration of school programs and mental health implied in the title of this chapter, no attention is given to the selection, screening, and training of school personnel; this material is treated in Chapter V.

Approaches to School-Community Programs

Most school-community undertakings can be categorized readily in terms of the particular clientele directly affected and the intentions of the mental health activities. When the various enterprises are grouped according to the criterion of underlying intention, we discern a kind of gradient; at one extreme are those programs that wait until the child gets into difficulty. Children with problems are identified or located and referred to a clinic or similar facility for treatment. The purpose of working with the child is to treat the difficulty early in life to prevent it from becoming more serious. This type of preventative activity concerned with identifying and treating borderline and ineffectual functioning has been called "secondary prevention" (71, 103).

When we consider how the child becomes a problem, current thinking postulates the interaction of two major forces. Some behavior deviations arise from an organic deficiency without major environmental stresses. Others arise when a disorganized culture (150) or an excessive environmental strain acts on an organism relatively free from organic deficiency. The strains are produced when parents, teachers, and others attempt to work with the child without much awareness of the forces operating in the child's behavior and thus are not able to help him deal with these forces effectively. Untrained or prejudiced parents, teachers, nurses, doctors, other community citizens, peers, and the child himself when he does not understand his own feelings are thus thought of as sources of strain or sources of infection. Real prevention consists in removing these sources of strain. From this point of view prevention consists of activities designed to develop healthy nervous systems—such as assuring adequate nutrition of the mother during pregnancy and of the child thruout his years, preventing birth injuries and other types of injury to the nervous system—as well as to train parents, teachers, and other persons who work with the child. Such activities focus upon effective functioning and have been called primary prevention (71, 102, 103).

There also appears to be considerable variation in the extent to which workers in the mental health field accept as well established the generalization that untrained parents, teachers, and others are sources of strain. In descriptions of community programs one finds such statements as, "The parent is the most important influence in the child's life" or "The untrained teacher is a source of mental strain." The assertions are used as tho they were established guides to action. On the other hand, such a writer as Coleman (41) has questioned the uncritical acceptance of this hypothesis. He suggests that mental health education familiarizes the general population with the idea of psychiatry as a medical discipline and probably creates a favorable climate of opinion for the support of service and research in the field.

Nevertheless, the question of the effect on the child's mental health of training teachers, parents, and others who influence the development of children remains to be established. An increasing number of attempts are being made to determine whether any changes appear in the children who come under the influence of parents, teachers, or other groups receiving mental health training. Orientation with respect to the generalization varies considerably among current programs. Some assume that the importance of training the parent, teacher, and nurse is well established. Others are endeavoring to establish the validity of the hypothesis.

We shall use the two categories, "early treatment or secondary prevention" and "primary prevention," for classifying school-community mental health programs. Under the latter category programs are subdivided further, depending upon whether they involve the training of teachers, parents, or other members of the adult community, or the training of children in mental health principles. Some programs involve work with disturbed children and teachers of healthy children or other combinations. These "multiple-clientele" programs are listed under more than one heading. Since a number of papers are concerned with the general organization and introduction into the community of mental health programs in general, they are discussed first.

Organization and Development of Mental Health Programs in General

The importance of prevention in mental health was graphically described by Appel (7). He estimated that, including losses in earnings and productivity, the cost of mental illness to the country reaches an annual total of five to six billion dollars.

Aberle (1) reported the problems encountered in introducing into a community the Wellesley program described by Lindemann (108). This program involved both treatment and selected aspects of primary prevention. The importance of preparing a community by helping it to understand and appreciate the purposes of the various segments of a program and the need for working with already existing community agencies was

emphasized. A further report on the Wellesley project was provided by Naegele (120). The program is an example of a mental health project which combines service and research.

An analysis of the steps involved in developing on the local level a comprehensive program of mental health services involving both treatment and prevention was undertaken by Lemkau (101). He emphasized cooperation of school and community agencies. He also pointed out that altho official agencies bear much of the responsibility, their effectiveness usually is enhanced by "voluntary and nonofficial" groups of citizens. Ewalt (55) outlined the specific elements of a community mental health service designed to develop a population strong enough to handle the situations they meet. An illustration was reported in a detailed account of the Rochester Child Health Institute and the Rochester Health Center Counseling Clinic (95). At the state level, Guthrie (73) analyzed recommendations of the Council of State Governments relative to mental health and hospital programs in the United States.

Shibler (154) outlined a series of 12 criteria for evaluating a mental health program. In the list were such items as: Is there an awareness of need on the part of the general public? Is there adequate financial support of local and state programs? Is there public support thru individual and organizational services?

Sociological concepts were applied to the field of mental health by Clausen (37) who examined the role of the sociologist as a participant in programs. Training and research functions of the New York State Department of Mental Hygiene were summarized by Brill (23). The National Institute of Mental Health (168) developed a community casebook which contains brief digests of community procedures for initiating mental health programs.

Early Identification and Treatment of the Emotionally Disturbed

Screening Procedures

One of the most extensive studies of methods for identifying children in need of special help appearing during the period under review was reported by Ullmann (164, 165). Correlations between judgments of teachers as raters and assessments obtained from pupil self-descriptions ranged from .15 to .33. Ullmann found a fairly high correlation (.73) between categorical and forced-choice methods of obtaining teacher ratings for boys but only a moderate correlation (.43) between the two methods when applied to girls. An analysis of the data tended to indicate that teachers were not aware of the manner in which girls make significant adjustments and, lacking this awareness, they tended to rate them more favorably. With regard to self-descriptions and ratings, Ullmann concluded

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that a pupil's feelings about himself were relatively unrelated to the estimate of him by his classmates and teachers.

In Ullmann's study, rating devices appeared to be more valid in assessing the adjustment of boys as a group than of girls as a group. Self-descriptive personality tests seemed to have more validity in assessing the adjustment of girls than that of boys. Ullmann suggested that these differences may arise from the tendency of boys to express their method of adjustment overtly while girls tend to use subtle, subjective personal methods more extensively.

Any method of screening that involves teachers' judgments is affected by teachers' attitudes toward different patterns of child behavior. Stouffer and Owens (160), in repeating Wickman's well-known study, found that teachers of today are more aware of behavior indicative of social and emotional maladjustments. Nevertheless, as was true in Wickman's study, they are still more concerned with the aggressive, disturbing, disobedient girl or boy than with the submissive child.

Bullock and Brown (33) suggested that a battery of instruments, including the *California Test of Personality*, the *Ohio Social Acceptance Scale*, the *Wishing Well*, and the *Raths Observational Technic*, was helpful in identifying maladjusted children in a fourth-grade class. However, sufficient data to establish this point were not reported. Mangus and Seeley (113), using a combination of methods consisting of direct observation, inspection of records, questionnaires, and interviews in a study of Miami County, Ohio, found that 10 percent of the men of military age (18-37) had personality disorders severe enough to disqualify them for military service. About 18 percent of all third-grade and sixth-grade pupils were considered poorly adjusted and in need of help. Mental health problems were more common among boys than among girls, more frequent among third- and sixth-grade urban children than among rural children, and more frequent in the adult rural population than in the adult urban population. There was a suggestion in this study that the rural environment may be more adequate for children than for adults. Griffith (70) used judgments, as reported on a questionnaire by parents, teachers, and children, to identify behavior difficulties of children. Brown and Nemir (25) found that at the college level close cooperation between the student health service and a student counseling bureau appeared helpful in identifying student maladjustment.

An approach to the problem of identifying emotional difficulties which appears to deserve more attention in the future was suggested by Goldin (66). From his observations he concluded that elementary-school-age children have some awareness of their own emotional problems. If there were available professional personnel who are accepting and nonjudgmental in their attitudes, a "number of children" would be only too eager to come to them for help. Goldin's work suggests the possibility of developing self-referral procedures in which the resources represented by the

child's awareness of "being in difficulty and needing help" are utilized together with other resources for detection and screening.

Leighton (100), in the Stirling County study, sought to identify not only maladjusted individuals but also the social and cultural patterns that appear to have high strain-producing qualities. To identify maladjustment in individuals, he used a variety of data including records of first admissions to hospitals, records of persons voluntarily seeking help, and reports of persons considered by physicians as nervous and suffering from psychosomatic conditions. He also studied the discriminative index of questions assembled from a number of tests including the War Department's *Neuropsychiatric Screening Adjunct*. To identify stressful factors in the culture, he interviewed key informants, using a selected group of variables such as extent of poverty, speed of social change, and amount of migration. Data obtained relative to these factors were "inserted" in a "theory" of interrelationships to estimate their possible stressful quality.

Rennie (139), in the Yorkville community study, examined records of hospitals, clinics, and courts. In addition, he assembled a battery of questions from the *Neuropsychiatric Screening Adjunct*, the *Minnesota Multiphasic Personality Inventory*, and the *Cornell Medical Index* to screen potential cases for attention. He also used observations obtained during interviews and intensive psychodiagnostic interviews of questionable cases.

Clausen and Yarrow (38), in a careful analysis of the avenues thru which a patient comes to a mental hospital, found that the role of the wife of a patient was usually that of encouraging him to consult a doctor or a clergyman. Patients with somatic symptoms were usually seen first by a physician who made the referrals. Over one-half of the patients studied were seen by a psychiatrist prior to hospitalization. Clergymen made relatively few referrals. The general public's lack of knowledge of what services were available was quite evident.

McLean and others (110) developed a procedure for selecting narcotic addicts for psychotherapy. They used a social service questionnaire, a social work interview, a psychological test, judgments by psychiatrists, and a three-session "trial" in therapy. Results based on 100 subjects indicated that the interviews and the psychological test can select a sample similar to that which psychiatrists consider acceptable for psychotherapy after a brief trial.

In recent years there has appeared an increasing interest in the emotional problems of special types of children such as the unusually gifted and the handicapped. The Community Youth Development Program initiated by Havighurst and his associates (78), including Bowman and others (21), has as its purpose the early discovery of children who probably can profit most from special help. To screen fourth-grade children for mental ability, a battery of intelligence tests, observations by teachers, and reports from parents were used. A behavior description rating chart used by teachers and a "guess who" test filled out by pupils were used to screen for maladjustment. Procedures for identifying music and art

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talents were reported to be in the process of development. The pupils so screened became a part of a long-term study to determine the effect of special help provided by trained school and community personnel.

Mental health was considered by some who studied children with handicaps and serious diseases. The emotional problems of the physically handicapped adolescent were described by Norris and Cruickshank (122); the mentally handicapped child by Stull (161), and by Jolles (89); the deaf child by Levine (104), by Fibush (59), and by Albright (2); those suffering from malignant diseases by Richmond and Waisman (142); those suffering from cancer by Reznikoff (141); those with chronic diseases by Podolsky (132); and those suffering from tuberculosis by Warren (170).

Treatment Programs

A review of the purposes, staff, and functions of 10 different types of clinics, such as child guidance, reading, speech, orthopedic, and cerebral palsy, was provided by Birch (19). Gardner (63) reported trends in American child psychiatric clinics toward an expansion of nonmedical social casework functions and toward affiliation with hospital-connected children's clinics and with residence programs. Fabian (56) outlined the problems of organizing a child guidance clinical program to meet community needs and to establish effective community relations. The nature of a well-organized school psychological program was outlined by Grassi (68). Extension of clinical services for exceptional children in rural areas was discussed by Porter (133), and the functions of a mental health clinic serving an entire county were detailed by Maholick (112). Rooney and Miller (146) reported upon a project to develop an intake policy that would serve community needs effectively.

Methods used to determine clinical services needed for emotionally disturbed children and problems involved in organizing a mental health clinic were reported for a number of communities. An account of the evolution of a psychiatric program in Mississippi from its early beginnings was published by Magiera, Watters, and Underwood (111). Examples of community programs for the emotionally disturbed were reported from Harlingen, Texas (76), Phoenix, Arizona (95), and the Jewish Board of Guardians of New York City (4).

The organization of clinical services poses many questions as to the division of functions among the various specialties within the clinic and the relation of various community agencies to the clinic. A number of papers on the division of functions of psychologists and psychiatrists have appeared. An example is the report of a symposium on this topic by Moody (118). The interrelations of social casework and social group work were described by Pennock and Weyker (130), who concluded that the two approaches employed the same philosophy, goals, and knowledge of child needs. The relationships between family agencies and mental

health clinics were discussed by Austin (9); those of clinics and the courts by Clouston (40); clinics and other mental health agencies by Doyle (50); and the clinic and the school social worker by Janvier (86). A number of papers were concerned with the redevelopmental or re-educational program for the emotionally disturbed. A symposium on this topic was reported by Hay (80), Krug (96), Krugman (97), and Robinson (144). A review of recent studies relative to child therapy in education was provided by Seeman (153). As part of the Forest Hill Village Project with teachers in Canada, Seeley (152) described his use of classroom discussions of the pupils' own behavior as part of a total therapeutic program. Alpert (3) presented a plan for apprising the classroom teacher of the dependency needs of a group of emotionally disturbed children and for assisting him in developing re-educational procedures. A five-year project, using a comprehensive program for the emotionally disturbed and involving work with schools, homes, social work agencies, and camps was reported by Joseph, Thieman, and Hamilton (90). In a critical evaluation, possible uses of a therapeutic club were suggested by Falick, Rubenstein, and Levitt (57); and the value of a therapeutic camp was considered by Staver, McGinnis, and Young (158).

A list of residential treatment centers for emotionally disturbed children was provided by the U. S. Children's Bureau (166). Proposals for evaluation of therapy results were made by Gardner (64).

Programs for meeting the emotional needs of the mentally handicapped were reported by Brown (24), Cleverdon and Rosenzweig (39), Cruickshank (44), Johnson (88), Keller and Downs (93), Purcell (135), Weinrich (171) and Yannet (175).

The importance of working with parents of the emotionally disturbed, if redevelopment is to be effected, has been increasingly recognized. A number of papers on this topic appeared during the period under review including those by Bamford and Heinstein (11), Brubaker (27), Faris (58), Johnson (87), Lewis (107), Rosenthal (147), Siegel (155), and Zudick (178). The paper by Johnson reported the observation, based on 10 years of work with delinquents from good homes and their parents, that one or occasionally both parents derive unconscious and sometimes conscious gratification from the child's delinquency and unwittingly foster this behavior by their show of interest.

The problem of juvenile delinquency received increased attention during the period here reviewed. An extended analysis of the problem as it appeared in Texas with a description of therapeutic and preventative resources was prepared by Elliott and Smith and published by the Hogg Foundation (53). Other community programs were described by Buell (30), by Havighurst and Scott (79), and by Hill (83). The problem of training personnel was considered in a U. S. Children's Bureau publication (167). The importance of the family was highlighted again by Robinson (145); the importance of community conditions, by Beck (15). Recent developments in police methods for handling delinquents were pre-

sented by Chwast (36). A critical evaluation of available studies of the effectiveness of the Chicago Area Project, the Passaic, the St. Paul, and the New York City programs was prepared by Witmer and Tufts (174).

Programs for meeting the emotional problems of special groups also were reported. Those for the blind child were described by Bauman (14), Campbell (34), and Carr (35); and for the cerebral palsied child, by Hanna (75), Hayward (81), and Robertson (143).

Primary Prevention by Education of Adults

Primary prevention refers to measures taken to ensure effectively functioning individuals as well as to reduce the incidence of borderline or ineffective functioning. A consideration of the problem of preventing the development of disturbances suggests that educational programs in human development for parents, teachers, and other adults who interact with the child and for the child himself may play a large role.

The various programs involving adults can be classified into three subgroups: education of teachers and other school personnel, education of parents, and education of community members at large.

Education of Teachers and Other School Personnel

Such an extensive development has taken place in this area that a separate chapter of this issue is devoted to it. The discussion here is restricted to the relationships of professional community agencies to programs for the professional and inservice education of teachers. A very common pattern consists in having an agency, such as the mental health division of the state health department, provide consultant service to schools. A different pattern is to provide for partial support of school social workers.

In these programs two centers of emphasis appeared. Some programs were concerned primarily with training teachers to identify problem children and their role with respect to such children. Other teacher-education programs were not focused upon crisis situations or special cases but were designed to orient a teacher to work more effectively with all children.

An example of the cooperation of various state agencies with the schools was found in a brief report by the Inter-Agency Planning Committee of Pennsylvania (131). The Committee was composed of representatives from the Pennsylvania State Departments of Health and Public Instruction, Pennsylvania Tuberculosis and Health Society, and the State Medical Society. It provided workshops for the training of school personnel, encouraged the building of modern schools acceptable from the health standpoint, made possible renovation of school lunchrooms, and promoted discussions of the place of mental health in the total health program of the school. A somewhat similar interagency committee was developed in Connecticut (42).

Examples of states providing workshops for school personnel were Massachusetts (20, 114) and North Carolina (60) ; there were many others. Some states (121) provided more extended programs in the form of courses for school personnel. The University of Maryland, under the direction of Prescott, developed an extended program for the inservice education of teachers (95). The program of inservice training developed by Rankin (136) for the Detroit Public Schools in cooperation with two nearby universities is a good example of a local undertaking.

The above programs were for all teachers, and they were designed to help teachers extend their understanding of the behavior of all children, not problem children only. An example of a program emphasizing the training of teachers in the early recognition of problem children in need of referral was found in Virginia (77).

Another type of relationship between a state agency interested in mental health and the schools was the plan of providing trained consultants to work with teachers and other school personnel. An example of this type of relationship was the program developed by Vaughan (169) in Massachusetts. The consultants met with individual teachers to discuss procedures for dealing with children "maladapted" to the social environment. The plan of using consultants who meet with key individuals in a school, such as teachers and principals, was extended to include key individuals in other community agencies such as courts, social agencies, and public health units.

A third type of relationship between school and community mental health agencies was represented in a description of Connecticut's plan (42). Provision was made for the partial support of school social workers who are employed in individual school systems so as to facilitate a team approach to pupil personnel services.

Data relative to the effectiveness of the various school-mental-health-agency relationships were not available. As for data on the individual, Balser and his associates (10) compared changes in an experimental and in a control group as a consequence of attending a mental health workshop for teachers. They found significant shifts in the orientation of the experimental population as a result of the workshop experiences.

Two means of obtaining information about the child and his family were suggested. Eggleston (51) analyzed the relationship of the clinical social worker to the school. Langdon and Stout (99) prepared a discussion of interviewing technics for training teachers to interview parents.

Education of Parents

Another approach to primary prevention involves work with parents. The term *parents* may refer to parents thruout the community, such as mothers and fathers in a local parent-teacher unit, or it may refer to special groups such as parents of delinquents.

During the period under review several papers appeared reaffirming the importance of the education of parents. These papers included contributions by Bernhardt (16), Hale (74), Panton (129), Punke (134), and Regensburg (138). Bernhardt (17) also emphasized the twofold task of parent education: helping parents to achieve a measure of personal adjustment as well as insight into child behavior. A similar emphasis was suggested by Bard and Creelman (12).

Some of the dangers in arousing overanxiety in parents were discussed by Bruch (28), Meyer and Power (117), Schick (149), and Schwartzberg and Becker (151). The preparation of the public-health nurse for parent-education activities was described by Gundry, Hunter, and Itzkow (72).

The period under review was marked by an increased emphasis on research in the effects of parent-education programs. Brashear and others (22), Buchmueller, Porter, and Gildea (29), Domke and others (49), and Glidewell and others (65) reported various aspects of the St. Louis County Mental Health Program, an important section of which consists of testing the effectiveness of lay parent education. Lay leaders were trained in discussion group technics including especially the use of films. The trained leaders conducted group meetings for parents. The purpose of the research project described by Glidewell and associates (65) was to determine the effectiveness of the lay parent-education program singly and when combined with school-centered services. A carefully thought-out research design, using control as well as experimental groups, was described by Glidewell and associates. The study was in its early stages when this review was prepared, and no additional data were available.

Andrew (6) compared four workshop methods for teaching lay persons child-rearing concepts: a group-oriented approach, an authority approach, a question-answer procedure, and a "leaderless" approach. The group-discussion method with a resource person added did not prove superior to the other methods in teaching information. When the goal was to change "family entrenched" attitudes, however, the group-oriented method appeared somewhat more effective.

An attempt was made by Greenberg and his associates (69) to determine the effectiveness of the pamphlet series, *Pierre the Pelican*, by Rowland (148) of the Louisiana Society for Mental Health. This series was prepared for parents of newborn infants and was sent on registration of the first-born child. Greenberg and his associates, using data from experimental and control groups relative to feeding practices, found that the pamphlet series in and of itself had little effect on parental attitudes altho the experimental group believed that the pamphlets were helpful.

Konheim and Naiman (94) mailed six pieces of health literature to 153 parents of students taking a college course in hygiene. The pamphlets were also discussed with the students in the course. The proportion of parents stating they had remembered a new or important fact varied from 20 to 47 percent for individual pamphlets.

An observational comparison of two role-playing methods of using mental health films and plays was reported by Hollister and Husband (84). The two methods were the "feeling with" method, in which audience sub-groups were assigned the task of empathizing with specific characters in the play or film, and a "helping group" procedure which consisted in presenting a partial sequence and asking the audience to supply the remainder.

Another trend noted in the period under review was a recognition that mental health education programs when applied to parents have much in common with the parent-education programs of such community organizations as parent-teacher associations, federated women's clubs, and similar agencies. Instead of proceeding independently, mental health agencies were seeking increasingly closer cooperation in the form of community health councils where a variety of agencies pool their ideas and resources for developing parent-education programs (95).

During recent years an increasing emphasis on the training of lay leaders has appeared. Both the St. Louis and the Austin research projects involved lay leaders. The chairman of parent and family life education of the National Congress of Parents and Teachers in his annual reports (127) indicated that the need for leaders became an important problem following World War II. Consequently, the organization found it necessary to develop a program of state and council workshops for training leaders. In his 1955 summary (128), the chairman indicated that all the states reporting either had held such workshops during the year or were about to hold one. A program for parents emphasizing guidance of children in a free society and involving the training of discussion group leaders was developed by Kawin (91). Ehrmann (52) reviewed family research including parent education.

Mental Health Education of the Community

The problems encountered in introducing a mental health education program in a community were described by Cumming and Cumming (45). The program consisted of an initial and a final interview with a six-months interval for the educational activity. To introduce the program, names of leading citizens, leaders of clubs, and other influential community members were obtained from shopkeepers. The second interviews revealed that the program had aroused some anxiety and hostility which the investigators did not anticipate or attempt to control. Fraser (61) recognized the problem of audience anxiety in community mental health education programs and developed seven principles for controlling it.

An attempt by school superintendents in six communities in New York State to pool their thinking in developing facilities for exceptional children was described by Wiles (172). The organization of the community for a comprehensive school-community guidance program was considered by Williams (173), Cummins (46), and by the Hogg Foundation (53).

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State commissions on children and youth, such as that of Arkansas (8), attempted to organize community resources.

An analysis of Western civilization in terms of the extent to which it meets the needs of man was made by Fromm (62). His analysis of the needs of man and of the data on suicide, homicide, and alcoholism led him to conclude that the modern world does not meet man's needs. From his book, one could infer that school-community mental health programs might lead to a culture in which activities are more related to man's nature.

Approaches to the orientation of personnel in various community agencies to mental health principles received increasing recognition. For example, the National Association for Mental Health published a manual for police officers (115) designed to help them learn to recognize and deal with persons suffering from emotional disturbances.

The importance of training general medical practitioners and public health workers in mental health principles was pointed out by Mudd (119), Lourie (109), and Kazan and others (92). Kazan and associates discussed the conscious and unconscious resistances which they found in their attempt to train 160 public health nurses. The more advanced professionally the individual was, the greater tended to be the resistances.

The place of clergymen in a program of community mental health was stressed by Thalheimer and Coleman (163). A chaplains' service in marriage counseling conducted at the Menninger Foundation was reported by Crist (43). He advocated a broad training for marriage counselors. A method to help social agencies develop effective relationships with the "street corner group," which consists of teen-agers who reject formal agency environments, was suggested by Bernstein (18).

Gorman (67) outlined problems involved in the transition of a special group, such as the deaf, from school to community. Attendance at a special school led to both social and psychological conflicts during later integration into community living.

Education of the Child in Human Behavior and Mental Health

In the last two decades, theory and practice relative to mental health in education have considered not only the identification and treatment of the emotionally disturbed and the education or re-education of adults but also the potentiality of the child for extending his insight into and appreciating the forces that operate in human behavior and development.

When an analysis is made of the problem of teaching the child about human behavior, the interrelationship of teacher and child becomes a matter of central concern: Content has to be merged with attitudes and actions. If the teacher shows by his daily interaction with the child that he is not aware of, does not seem to care to become aware of, or does

not apply his knowledge of the forces operating in the child's behavior, he cannot be very effective in teaching the child to appreciate those forces. Some evidence of the part played by the teacher's daily behavior toward the child was furnished in a study by Zelen and others (177). In this study the child was taught for an hour a day by a special teacher while the regular classroom teacher remained unchanged. It proved difficult to produce a change in the child's orientation toward human behavior under such conditions. Only one of the two specially trained teachers was able to produce a significant change on the cognitive level, and no changes appeared beyond the cognitive level.

In addition to the influence of the daily behavior of the teacher toward the child, there is also the influence of those sections of the curriculum which deal with human behavior. Stiles (159), Herman (82), and Ojemann (123) provided data indicating that current content relating to human behavior as found in general and special readers, social studies, and health materials is largely descriptive in character. Discussion is focused principally upon what people do, not on the forces underlying their behavior. Thus, thru curriculum content the child is taught a descriptive approach without the underlying dynamics.

In reviewing the investigations concerned with the teaching of human behavior and development on the child level, therefore, we can identify three types. The first consists of those programs which supply teaching content relative to human behavior for the child but which leave the teacher and the usual or regular curriculum content unchanged. The human behavior teaching content is in the nature of an addition to the already existing curriculum. The second type consists of those programs which emphasize the training of the teacher as well as the introduction of additional content for the child but leave the usual curriculum unchanged. The third consists of those approaches involving the training of the teacher and the revision of those parts of the curriculum that deal with human behavior to include the dynamics of development.

Programs Supplying Additional Teaching Content— No Change in Teacher or Curriculum

Prior to the period under review Bullis and O'Malley (32) had published three volumes of teaching materials under the general title of *Human Relations in the Classroom.* The details of the program were summarized in the volume edited by Kotinsky and Witmer (95). No extensive studies of the effectiveness of this program have been made beyond the observational statements by teachers and others. A somewhat different program for the first grade, consisting of discussions and dramatizations of personal experiences, was described by Rector (137).

Slobetz and Lund (156) reported a study of the effect of a program for personal development in the fifth grade. A unit-method program was devised which was designed to help children understand themselves, their

minds, bodies, and emotions, and to help them learn how to live with
themselves and others. The experimental group consisted of 26 fifth-graders
whose mental ages obtained from the *Otis Intelligence Test* ranged from
110 to 178 months with a mean of 140 and a mean IQ of 108. The control
group was composed of 19 pupils from another school. Their mental ages
ranged from 95 to 174 months and their mean IQ was 106. Form AA of
the *California Test of Personality*, and a free-response instrument were
administered at the beginning of the five-month experimental period, and
Form BB of the *CTP* and a second free-response instrument were given at
the end of this period. A significant difference between experimental and
control groups on the *CTP* was obtained. In an investigation of the rela-
tive effectiveness of an instructor-centered lecture versus a student-centered
discussion method of teaching human relations, DiVesta (48) found that
both experimental groups changed significantly when compared with an
uninstructed control group, but neither experimental method proved
superior to the other.

One of the variations of the general plan of providing content in addi-
tion to the regular curriculum and without special training of teachers is
that of supplying the child with novels and other types of literature relat-
ing to human problems. A juvenile court project in which children were
supplied with selected books, magazines, and theater-television tickets was
described by Slocum (157). General observation seemed to indicate that
the results were encouraging.

A study of adolescent attitudes toward seeking help with personal prob-
lems was reported by Holman (85). She found that adolescents were
most apt to seek help for school and vocational problems and least inclined
to seek help for personal problems. The person to whom they went differed
with the type of problem. They often did not seek help lest they be con-
sidered maladjusted.

Programs Supplying Additional Teaching Content and
Training of Teacher—No Change in Curriculum

One section of the community program described by Seeley (152) con-
sisted of the training of selected teachers and school administrators to
enable them to guide more effectively the discussion of human relations
in the classroom. Children were encouraged to discuss their problems
freely in the classroom. The observers of this program reported favorable
results. The first report of the program of the University of Toronto
Institute for Child Study which attempted to help the child learn about
his social environment thru an emphasis on the consequences of behavior
was prepared by Brown (26).

Closely related to the programs for teaching human behavior were the
various attempts to teach psychology in the school. A survey of the ex-
tent of this endeavor was reported by Engle (54). He found that most of

the courses dealt with mental hygiene in its broadest aspects. The necessity for training teachers was also apparent.

A number of books appeared which were concerned with the effect on the child of the pattern of human relations set by teachers and school administrators. An example of a volume for teachers is the one prepared by Lane and Beauchamp (98). Bartky (13) prepared material for administrators. An earlier book by Yauch (176) was also designed for administrators. An investigation of the influence of the principal on pupil human relations was reported by Maynard (116).

Programs Changing Curriculum Content—
Teacher Is Given Additional Training

The program described by Ojemann (126) is an example of an attempt to include the dynamics of human behavior as an integral part of the curriculum. Content concerned with human behavior is not added; rather, all sections of the curriculum dealing with human development are revised to incorporate the basic dynamics. The aims of this program were set forth in a paper by Levitt and Ojemann (106), some details of its application to the secondary school were described in a paper by Ojemann (125), and an extensive study of the effects was reported by Ojemann and others (124). A comparison of experimental and control groups in the fourth, fifth, and sixth grades indicated that significant changes in the direction of a causal orientation appeared at all three grade levels. Furthermore, there was a decrease in the tendency of the subjects to be arbitrarily primitive. In a further study by Levitt (105), it was found that the experimental subjects had become significantly less authoritarian and also more willing to assume responsibility.

An investigation using revised curriculum content at the eighth-grade level was reported by Taba and Elkins (162). Human relations were emphasized in all aspects of the instructional program in social studies, literature, and guidance. Effects were measured by sociometric tests, interviews, themes written by the pupils, and anecdotal records. The experimental group changed from an egocentric orientation toward a more rational response to social situations. No control group was used.

Closely related to the studies in this section were papers which considered the effect of the general arrangement and organization of the school on the development of mental health. A paper by Anderson (5) described a plan for ungraded classes below the fourth grade to avoid frustration and other difficulties arising from failure of promotion. In an examination of the emotional effects of elementary-school testing, DeLong (47) collected data from questionnaires completed by teachers, observations by graduate students, and observations of pupil behavior. Changes from usual classroom behavior appeared during the testing period, and the author suggested that they be studied further as to their significance. In

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an essay which could raise questions for study, Resnick (140) analyzed problems involved in meeting the mental health needs of large classes.

Summary

This review of school-community programs in mental health has indicated that they cover a wide range. Some were concerned mainly with secondary prevention, that is, locating the child in difficulty and applying treatment early to prevent the problem from becoming more serious. Others focused upon primary prevention—upon influences that tend to produce the disturbed child, such as untrained parents, teachers, community citizens, and the child's peers, as well as noncausally oriented teaching content and the child's lack of insight into his own problems. Some programs were concerned with both secondary and primary prevention. It appears that both approaches are needed for a comprehensive program in mental health. The clarification of the distinction between secondary and primary prevention and the expansion of endeavors especially in primary prevention is encouraging, but many more investigations are needed.

Encouraging, also, is the increased emphasis on careful measurement of the effectiveness of the various educational programs. For a sound development of this field it is essential that the basic assumptions of a program be set forth and then be subjected to test. It is a difficult task to provide for adequate controls of the variables influencing the effect of a program, but such experimental data are needed.

Studies should also be made of the effectiveness of different types of home-school-community relationships. Since the forces in the home, school, and community all play upon the child, coordination of and cooperation among the several influences are needed for producing effective changes. Several different ways of bringing about coordination and cooperation were described, but so far no studies of their relative effectiveness have appeared.

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CHAPTER V

School Personnel and Mental Health

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THE literature on school personnel and mental health has increased markedly during the seven years since the corresponding number of the REVIEW in 1949 wherein the topic was incorporated in a chapter on mental health in schools and colleges. Many publications are of the exhortative or admonishing type in the form of pamphlets and discussion articles directed toward school people. Nevertheless, a theory-research point of view is beginning to emerge in action programs, in correctional studies, in a few experimental designs, and in steps being taken to develop and assess new patterns of preservice and inservice education with a mental health orientation for school people.

Two premises seem to underlie not only some of the most promising action and fundamental research to be reviewed but also much of the less research-orientated literature. The first assumption is that professionally competent school personnel are concerned with the mental health as well as the academic achievement of girls and boys under their care. The proposition is not accepted by all—especially the critics of modern education—but the trend is illustrated in the yearbooks of the Association for Supervision and Curriculum Development (7, 8) and of the National Society for the Study of Education (103). Apparently the science of mental hygiene is shifting from its traditional preoccupation with abnormality to an emphasis upon normal development and learning under the influence of a number of different adult and age-mate cultural agents and to increased concern about the prevention of behavior difficulties. The yearbooks and, to some extent, textbooks on mental health and education by Redl and Wattenberg (116) and by Lindgren (86) are reorienting the professional undergraduate and graduate education of school people.

The second premise is that borderline and relatively ineffective personnel can be made more perceptive, adequate, and stable, and that already effective school people can increase their professional capacities thru preservice and inservice education which focuses at least in part upon human development and behavior. With the current shortage of teachers, selection beyond the elimination of the manifestly unfit is almost an academic question. Instead, steps are being taken not only to build up the understandings which teachers and special service personnel have of young people and the communities in which they live but also to promote interpersonal competencies and personal identity. New kinds of courses in an increasing number of teacher education institutions are paralleled by the appearance of books written from an interdisciplinary point of view. Examples include textbooks by Almy (3) and by Martin and Stendler (95) which incorporate psychoanalytical and cultural concepts and re-

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search findings as well as maturationist and behaviorist views from psychology. Drawing ideas and case materials from a long-term study of a Midwestern community, (Elmtown, Jonesville, Prairie City), Havighurst (63) has elaborated the concept of adjustment tasks in human development and education.

With regard to inservice education, at least four approaches are calculated to introduce a mental health orientation into educational theory and practice. Child study initiated in its latest form by Prescott (112) and his associates, a perspective on the school culture and intergroup education as described by Taba and others (143), the action research point of view adopted by Corey (32), and the study of community patterns and family expectations by school people as reported by McGuire (89, 90) all have a mental health orientation. They are calculated to bring about not only effective perception of reality and professional competence but also some understanding of self in school and personal roles.

In addition to the literature on the orientation of school personnel to mental health in education, there are numerous empirical studies dealing with teacher morale, attitudes toward people in education, the personality make-up and outlook of persons in school systems, and their relationships to pupils and associates. Where the reports have a bearing upon the schools and mental health, the empirical research is reviewed under appropriate headings in the remainder of the chapter.

Motivation, Role Conflict, and Morale

The degree to which school people accept and put into effect the mental health point of view in education is influenced by their motives, by experiences in professional roles, and by morale factors. Recent evidence gathered by Wattenberg and his associates in Detroit (149) and by McGuire and White in Texas (93) indicated an increasing diversity among teachers and other school personnel which has far-reaching consequences. In Detroit, a large block of teachers with a labor background were specializing in physical education, industrial education, home economics, social studies, and the other academic high-school subjects. Whether these upward mobile teachers from a somewhat different life style appreciated the attitudes and values of lower-class adolescents or, to gain acceptance, approval, and self-identity, denied their origins and stressed academic achievement was a question which required further research. If teachers reflected their backgrounds, metropolitan elementary schools in the area should be more middle-class than the secondary schools in their teacher-created atmosphere.

In their intensive study of 50 elementary- and 50 secondary-school teachers as well as of 25 counselors and 25 administrators (including principals), McGuire and White (93) found 48 percent upward mobility and evidence for acceptance of school people in upper-middle status in a majority of Texas communities compared with the lower-middle posi-

tions in the northern study. Regardless of origin, a majority of their subjects appeared to be men or women who preferred situations which were structured, where a certain security was assured, and where the behavior of other people was predictable. Exceptions either were misfits or effective professional people who could operate in a variety of situations, take calculated risks, and anticipate responses to be expected from their actions.

Motivations of teachers to enter or to remain in the profession were studied by LaBue (78), by Ringness (119), and by Willcox and Beigel (155). Their findings could be subsumed under concerns for social service, prestige, security, and interest in subjectmatter. The 1952 ASCD yearbook (8) summarized some major sources of anxiety, fear, and tension among school personnel. Relatively low salaries with resultant worries of many kinds often were paralleled by excessive teaching loads as well as crowded classrooms. Rigid standards of behavior imposed by the community characterized an unpleasant environment in many instances. A number of school people found extracurriculum activities and community responsibilities excessively fatiguing. In addition, other school people expressed concern about relationships with schoolboards, administrators, and other teachers as well as pupils. Similar lists were reported by Hilding (66), by Kaplan and O'Dea (74), and by Kvaraceus (77). None of the foregoing surveys drew sample populations according to social and psychological characteristics or established consequences of the several kinds of motivations and frustrations.

Beginning with a psychosociological framework for the study of educational administration prepared by Getzels (48), Getzels and Guba (49, 50) sought explanations of the points of articulation among role conflict, personality, and effectiveness. In general, they found that the extent of role conflict varied with incompatibility of expectations and that intensity of role conflict was related not only to certain individual and attitudinal characteristics but also to role effectiveness. In interviews with teachers, they uncovered conflicts related to the expectations of the school and community as well as to role assignments in one situation and another. Not only did they develop a theory with explicit hypotheses to be tested, drawing sample populations from real-life military and educational settings, but also they constructed situational and personalistic role-conflict instruments based upon earlier interviews to supplement standard psychological tests (60).

Relationships among status, roles, personal characteristics, and effectiveness of school personnel were probed by a number of other investigators. Becker (15), thru interviews, examined reactions of teachers to the authority system of the school. Gordon (52) considered the role of the teacher in the social structure of the high school. Seeman (126) defined role conflict in terms of incompatible behavioral expectations and distinguished status, authority, institutional, and means-ends dimensions. Thru interviews he delineated dilemmas of action for leader and follower

in the school setting. In response to descriptions of ideal leaders, super-intendents and principals were significantly less ambivalent than teachers. Phillips (110) explored community control of teacher behavior, and Brookover (20) added another dimension by considering the stratification of American society and its impact upon school people.

The highest proportion of both annoyances and satisfactions reported to Kline (75) by a group of experienced teachers arose from what they believed was expected of them rather than from what they wanted. Jenkins and Lippitt (70) concluded that a major area of concern to teachers, students, and parents involved interpersonal perception. Grant (57) studied perceptions of counselors, and Danskin (38) analyzed roles they played in their interviews.

Morale may be defined as a feeling of well-being which underlies effective functioning when an individual experiences acceptance and approval from significant others and when critical self-expectations either are fulfilled or have a reasonable chance of being attained. More or less within this frame of reference, the morale of school personnel was studied widely but somewhat superficially. Not all investigators would agree with the foregoing definition or upon operations to estimate degree of morale. Hunter (68) and Tomeday (145) provided some evidence that teachers find considerable satisfaction in their work even when they point out unfavorable aspects of their profession. According to measures employed, Arnold (6), Goodwin (51), and Hilding (66) demonstrated higher morale among elementary- than secondary-school teachers. Other aspects of the problem were studied by Anderson (5), Bevans (18), and Rogers (120).

Responses of school personnel to stress in beginning experiences and problem situations received some attention with most reports based upon answers to questionnaires. Lumpkin (88) employed a four-group experimental design with subsamples of male and female subjects in secondary education. He demonstrated significant changes in Q-sample self-descriptions and sentence completion responses of student teachers participating in a series of group counseling sessions compared with equated controls who had only supervised classroom experiences. Men in his sample populations responded in a manner different from that of the young women not only to the group counseling but also to the common student teaching experience; the sexes agreed only on their valuations of the role of the teacher. Travers and his associates (146) examined the anxieties of a group of student teachers and Wey (152) surveyed their difficulties. Smith (133), Wallace (148), and Stout (140) were concerned with the induction of new teachers into service. Wellbank (151) examined the problems of high-school teachers, and Clark (26) considered the tiring effects of various teaching activities. Using a checklist of 51 problems, Mills and Rogers (99) concluded that experienced elementary-school teachers were concerned most about teaching dull children and dealing with seriously maladjusted boys and girls in the classroom; problems of grading, promotion, and retention were also of concern.

Personality Attributes and Interpersonal Competence

School personnel are expected to be men and women who carry out educational roles effectively and maintain acceptable interpersonal relationships in complex social situations. The complexity arises in that not only are superiors, associates, and subordinates operating within the line and staff organization but also potentially stressful relationships exist between professional faculty and custodial staff on the one hand, and pupils and parents on the other. By and large, girls and boys are from another generation, and some hostility between age-groups is to be expected. The young person soon discovers that one type of response often is rewarded by his own age-mates; another by his parents and their age group. Thus, conflicting cultural patterns arise—the value systems of homes of several life styles, of peers in an age-mate society, and of the school faculty. Relationships with parents and other laymen in a community are more complex than those found in a business or industry as a consequence of the tradition of local control and the responsibility of school people thru a superintendent to a board of education representing the population of a community.

The study of the psychological characteristics of school personnel and of relationships and competing value systems within the psychosocial world of a school and its community is only just beginning. Most of the investigations to be reviewed are empirical with little attention being given to theoretical orientation, research design, adequate sampling, and the criterion problem pertinent to some of the inquiries. Nevertheless advances are being made both in the conceptualization of areas of study and in methodology. Probably here, more than anywhere else, carefully designed research should permit prediction and control of the impact of the schools and their personnel upon the competence and effectiveness of their pupils and upon the mental health of the community being served.

Careful conceptualization and illustrations of methods of personality assessment characterized a program of research reported by Stern, Stein, and Bloom (137). In assessment, they asked, "How did the subject get to be the way he is?" (diagnostic function) and "How will the subject interact with the specified stress in the immediate or more distant future?" (predictive function). Criteria were based not only upon psychological formulations of demands in the predictive situation but also upon systems of values (standards of behavior) held by judges or significant others who made ultimate evaluations either of competence or effectiveness. One of their projects involved young women in an elementary teacher education program to illustrate assessment in terms of an analytical approach. Empirical, synthetic, and configurational modifications were explored with special attention to an *Activities Index* and an *Inventory of Beliefs* as well as to comparisons among theologians, teachers, and physicists.

The Mental Health in Education Research Program at the University of Texas (91) provided a theory-research orientation and some preliminary

findings. Peck (109) and his associates employed sentence completion responses and a psychodynamic frame of reference to predict teacher potentiality in terms of personal effectiveness and interpersonal competence. Should Peck's sampling of prospective elementary-school teachers be representative and his predictions hold to ultimate real-life criterion situations, one would infer that from one-third to one-half of the teaching positions in school may be manned by aimless, overdependent, intellectually inept, discontentedly unhappy individuals. Other reports from the same team of investigators (92, 102) were rich in conceptualization, in instrumentation, and in research findings about personality attributes and variables characterizing the mental health, interpersonal competence, and relative effectiveness of men and women now in teacher education or in school situations.

The Teacher Characteristics Study, carried on by Ryans (121, 122) and his associates at the University of California at Los Angeles, sought to identify and analyze patterns of teacher behavior and to develop psychometric instruments for their prediction. Attention was limited to the personal and interpersonal classroom behaviors of a group of 275 third- and fourth-grade teachers with trained observers recording dimensions of pupil and teacher behavior on a *Classroom Observation Scale*. Five fairly highly intercorrelated factors were extracted after testing for reliability of ratings (.69 to .84, varying by community). They were defined positively as follows: A, originality, adaptability, tolerance; B, businesslike manner and controlled pupil activity; C, composed and steady with an understanding, kindly, fair approach; D, sociability; and, E, good appearance. Pupil behavior traits contributed to factors A and B and led to speculations about the mental health of boys and girls in the various classrooms studied.

In general, efforts to identify personality differences between superior and inferior school personnel, to isolate a "teacher personality," or to predict either competence or effectiveness of student teachers by means of psychometric or projective instruments led to limited results. Representative investigations, using psychometric instruments (especially the *MMPI* and scale modifications), were reported by Carlile (21), Gough and Pemberton (53), Gowan (54), and Gowan and Gowan (55, 56), Lamke (80), Michaelis (97), Michaelis and Tyler (98), Tyler (147), Ringness (119), and Zwetschke (161). Cooper and Lewis (31) as well as Page and Travers (108) worked with quantitative *Rorschach* factors. Schultz and Ohlsen (124) and Ohlsen and Schultz (104) differentiated among student teachers with the *Strong Vocational Interest Blank,* and Mitzel (100) employed interest factors to predict rapport of teachers with pupils. Reed (117) related effectiveness in the classroom to the degree to which a teacher is an accepting person.

Symonds (141) continued the study reviewed in the corresponding issue of the REVIEW in 1949 and used pupil evaluations to determine teacher effectiveness. He and Witty (158) were essentially in agreement that the

effective teacher likes children and is secure, self-assured, and well integrated. Characteristics of counselors were studied by Hermann (64) and by Cottle and Lewis (33). The effective principal was depicted by Silverman (129) as a person who fulfils a teacher's need for security, by Sharpe (127) as one who conforms to culturally conditioned norms, and by Shipnuck (128) as an individual who rates himself as somewhat more hostile than his teachers do while agreeing with them on most other attributes.

An attempt by Levin (84) to establish a new perspective on teacher competence, which spelled out a theoretical framework and emphasized operational definitions with measures anchored in denotable behavior, should be of value to research people in this area. His model would lead one to predict from antecedent personality characteristics and indications of interpersonal competence to specific kinds of classroom behavior, and link to effects upon pupils.

With regard to the criterion problem, Fink (42) found that principals tended to give favorable ratings to teachers who were characterized by rigid, authoritarian, conforming types of personalities. The finding illustrated the necessity of taking account of the varying value standards of judges, as emphasized by Stern, Stein, and Bloom (137), and the existence of many kinds of "goodness" and "poorness" pointed out by Levin (84). Perhaps a limitation in studies in the area under review was a failure to recognize the possibility that several kinds of personality make-up and role behaviors (in subjects and judges) lead not only to various types of competence, to be described behaviorally, but also to different kinds of effectiveness in terms of what happens to persons (younger and older) with whom school personnel work.

Relationships and Understandings

The research reviewed in the preceding section should be associated, were Levin's model (84) followed, with that found in this section. Altho the division is primarily for convenience, the separation does symbolize the present state of affairs in the study of school personnel. With an emphasis upon surveys and correlation studies, to which there are relatively few exceptions, present research designs do not permit one to answer questions as to what kinds of school personnel have what types of relationships or ranges of understandings of persons (pupils, parents, associates) with whom they work and the effects of such relationships and understandings upon those concerned. Nevertheless, some valuable leads can be found in what has been accomplished to date.

Various aspects of the teacher-pupil relationship were investigated during the period under review. For example, Jackson (69) considered the effect of classroom organization and practice, and Laycock (82) examined the impact of teacher personality upon the adjustment and behavior of pupils. Amatora (4) found a positive relationship between teacher and

pupil personality for 100 teachers and their pupils in Grades IV to VIII. No causal relationship was imputed. Gage and Suci (47) inferred that teachers who estimate student opinion in school affairs more accurately tended to receive higher ratings from their pupils. In a review article relating his work to that of others, Gage (44) concluded that accuracy of social perception was related positively to effectiveness as a teacher, as a supervisor of a clerical staff, and as a group leader. Nevertheless, a later test of understandings (46) showed few relationships between the pattern of teachers' three accuracy scores (cognitive, sociometric, sensitivity) and pupils' ratings of the teachers.

Two samples of teachers in classrooms judged to have "excellent" and "poor" social climate were studied by Polansky (111), who found that the former were more supportive of group structure among pupils. From interviews with pupils, teachers, and administrators, Singletary (130) concluded that teacher-pupil relationships differed at the various grade levels and that they were more clearly defined than pupil-administrator relationships. Becker (14) identified social-class variations in teacher-pupil relationships.

In addition to Silverman (129), Sharpe (127), and Shipnuck (128), whose dissertations were mentioned in the preceding section, several other investigators were concerned with the effects of the principal on pupils or teachers. Goodwin (51) found no significant difference in teacher activities and human relations in terms of democratic as contrasted to authoritarian working patterns of school principals. Maynard (96), however, reported that pupils in democratic schools expressed more favorable attitudes toward the school than did pupils under authoritarian leadership. Banning (12) concluded that degree of favorableness toward curriculum change was a function of personal relationships between teachers and administrators. Thru interviews with 105 superintendents and over 500 members of boards of education, Gross (58) identified major sources of tension, and, along with Mason (59), he discussed some of the methodological problems of long interviews.

In addition to the interview, some attention was directed to other instruments and technics for studying relationships in schools. Alexander (1, 2) devised the *Adult-Child Interaction Test* and used his new projective technic in an attempt to predict teacher-pupil interaction. Cook and Medley (29, 30) proposed two new scales for the *MMPI* designed to measure ability to work harmoniously with people and investigated relationships to scores on the *Minnesota Teacher Attitude Inventory*. Rabinowitz (113) reported on the "fakability" of the latter instrument and, with Travers (114), introduced a drawing technic to elicit ideas held about a teacher in a class. Leeds (83) developed a scale for measuring attitudes and rapport between teachers and pupils. Withall (156) derived a climate index, and Wrightstone (159) described the measurement of social climate in the classroom.

Several approaches were directed toward the nature and degree of understanding which school people have about human behavior, especially teachers' perceptiveness about pupils. Juul (72) obtained correlations of −.42 and −.53 between scales designed to measure authoritarianism in teachers and their attitudes toward child behavior. Sex of respondent, social class, and ethnic membership were sources of variation in responses to both measures. Claiborne (22) tabulated replies of 1171 Negro teachers from 16 Southern states on a checklist of 115 classroom activities representing "sound" and "unsound" mental hygiene procedures. He concluded that graduates of a teacher-education course recognized the "sound" procedures to a greater extent than did college graduates with equivalent degrees but without similar teacher education for their classroom duties. Using the *Case of Mickey Murphy,* Baker (11) showed that 74 graduate guidance workers scored higher on all three scales indexing knowledge of human development and behavior than did an equal number of graduate teachers. Loy (87) failed to find changes during the student-teaching period in attitudes toward pupils and use of principles of behavior as measured by four tests and inventories. On the other hand, Day (39) reported a negative shift in attitudes toward children and schoolwork among first-year teachers according to responses to the *Minnesota Teacher Attitude Inventory.* Witryol (157) identified age trends in children's conceptions of what teachers approved and disapproved and in what teachers asserted they would praise or blame, finding considerable agreement.

Several investigators compared the understanding of children's behavior held by today's teachers with what teachers reported in the Wickman (154) study of 1928. Schrupp and Gjerde (123) employed the same 50 behavior problems and directions with 119 teachers and 37 mental hygienists. Rank order correlations of .80 and .88 were obtained between ratings of groups of mental health personnel. The 1951 teachers agreed more closely with the "ideal" criterion (rho = .56) than did those of 1927 (rho = −.11). Stouffer (138) and Stouffer and Owens (139) sampled 481 teachers and 70 mental hygiene people in an extension of Wickman's design. He reported a correlation of .52 between rank order arrangements by teachers and mental hygienists as to seriousness of behavior when the original procedure was duplicated, and .67 when teachers followed the same directions and conditions as the people in mental health work. Similar findings were reported by Morsh and Plenderleith (101) and by Clarke (27) among Canadian teachers, as well as by Sparks (135). All were in essential agreement that modern teachers have moved toward a clearer understanding and acceptance of behavior but still tend to emphasize as most serious those problems which transgress their moral sensibilities or frustrate them in their classroom duties. Using somewhat different procedures, Kaplan (73), Slobetz (131), and Stendler (136) supported such a conclusion.

In opposition was a report by Clark (25) of the reactions of 181 elementary-school teachers to a modified forced-choice instrument designed

to determine what behaviors annoyed them most. Rated high in importance were those behaviors affecting the smooth functioning of the group; and low, those affecting the teacher more or less directly. As part of the same investigation, Clark (24) found that certain types of behavior were more annoying to teachers with "good" mental health than to those with "poor" outlooks, and vice versa. The criterion of teacher mental health was performance on the *Guilford-Martin Personality Battery* (23). A further interesting twist was supplied by Clarke (27), in Canada, who concluded that maladjusted teachers, as identified by *Rotter Incomplete Sentences Blank* responses, were closer to the mental hygienists' attitudes on Wickman's list of behavior problems than were well-adjusted teachers.

Ratings by school personnel frequently were obtained for one purpose or another in much of the research reviewed. Ausubel, Schiff, and Zeleny (9) found that teachers' ratings of adolescent adjustment and aspirations (persistence, scholastic competitiveness, and academic aspiration) were quite reliable (.83 to .90) but raised serious questions about validity, especially with regard to aspiration when compared with "real-life" indexes. Moreover, their assessments of adjustment appeared to have more validity for the 26 high-school girls than for the 24 high-school boys studied in the junior year of a university high school. Their ratings involved what had been termed "interpersonal perception" (empathy, insight, accuracy of social perception, and diagnostic competence), recently reviewed in a conceptual and methodological article by Gage and Cronbach (45). Studying the behavioral correlates of social perception or understanding of others, Gage (44), Gage, Leavitt, and Stone (46), and Gage and Suci (47) reported empirical research testing technics and methods of analysis for which Cronbach (35) and Cronbach and Gleser (36) contributed theoretical and mathematical formulations.

Preservice and Inservice Education

Two recent books designed for teacher education epitomized a shift in educational psychology and in curriculum and instruction toward a mental health orientation. In his account of the learning process in school situations and the evaluation of outcomes, Cronbach (34) placed as much emphasis upon acquisition of self-respect and self-confidence, interpersonal competence, and absorbing personal goals as upon care for physical security, solving problems as correctly as the available facts permit, and wanting to do what society considers "good" with the ability to be critical of "conventional" values. Otto (107) considered developmental tasks as educational objectives in elementary schools as well as the importance of the classroom society, the influence of experiences in the cultural matrix, and learning procedures in social contexts.

Altho modifications were taking place in patterns of undergraduate and graduate education of school personnel, only a few action appraisals or experimentally designed evaluations of shifts toward a mental health

orientation appeared. Dissertation studies by Slomowitz (132), Timmel (144), and Reinhart (118) necessarily were limited and inconclusive in results obtained. As mentioned earlier, a longitudinal study of trainees was under way at Harvard (84) where varying amounts of behavioral science foundations form part of fifth-year programs designed for college graduates.

Two experiments in teacher education were included in an extensive report of progress by McGuire and his associates (92) at the University of Texas. Over and above individual and within-group variations in responses to course, field, and laboratory experiences among elementary-education majors, there were significant differences between sample populations with and without a student-teaching experience as well as between samples of young women drawn to represent "dominant" compared with "conforming" family life styles. Experimental groups differed from controls as predicted in several kinds of self reports, presorts and postsorts of structured Q-samples, and analyses of responses to a sentence completion technic.

Various kinds of mental health oriented work conferences for experienced school personnel were sponsored by universities and teachers colleges, particularly in the summer, and by mental health agencies. Well-controlled studies of what happened to participants were rare. In an intergroup relations workshop at Harvard, Levinson (85) concluded that receptivity to new ideas was influenced by initial personality characteristics. Taba (142) published an evaluation of workshops devoted to leadership training in intergroup education. Outcomes of annual one-day workshops for educators, begun in 1950 by the Massachusetts Association for Mental Health, were assessed by Bower (19), Laserte (81), and Margolin (94). Experiences in the experimental combination of a seminar and group psychotherapy were reported by Weinreb (150) and by Berman (16, 17) who inferred that the optimal emotional functioning of the average educator participating had been restricted by "normal" psychoneurotic defenses and personality attributes.

The training program of the Forest Hill Village Project (125) was evaluated favorably by both Laird (79) and Whitley (153). Four groups of school personnel from every province of Canada experienced a one-year training program between 1948 and 1952 at the University of Toronto with Forest Hill, a suburb of Toronto, as a laboratory. There they participated in service activities including a clinic within the school setting, human relations classes for improvement of the mental health of young people, and a social psychological study of the village. Participants then returned to their respective school systems where they served as mental health consultants. This is one of several projects, including Ojemann's program (105) to extend teachers' understanding of the dynamics of behavior and to develop methods for teaching causally oriented curriculum content, which were evaluated by a committee of the Group for Advancement of Psychiatry (28).

A large number of school systems carried on mental health oriented inservice education programs for their educational personnel, many with consultants from universities and colleges. Evaluations by Avery (10), Duff (40), and Haddock (61) of either two- or three-year child study programs sponsored by the University of Maryland emphasized that changes in sensitivity to principles of human development and their application occur slowly. Rankin and Dorsey (115) assessed outcomes of the Detroit School Mental-Health Project in terms of positive reactions of teachers. Herrick and Knight (65) described a framework for child study and the analysis of learning episodes complementing Knight and Holdsworth's account (76) of results in programs with consultants from the University of Texas. Dissertation studies by Beauchamp (13) and Dysart (41) at New York University and by Holmlund (67) at the University of Michigan inferred an improvement in social-emotional classroom climate as a consequence of inservice education programs for teachers. Wrightstone and others (160), employing sociometric technics, concluded that a small but significant improvement in social acceptability occurred among "isolates" serving on committees with other teachers identified as "stars." Teamwork projects involving the special-service staff, especially school counselors, school nurses, and visiting teachers, with participants from the teaching faculty were reported in Texas (62, 134).

A number of important publications came out of activities (in association with local-school systems) of the Horace Mann–Lincoln Institute of School Experimentation at Teachers College, Columbia University, in addition to Corey's book on action research (32). With the assistance of school personnel in Denver, Cunningham and others (37) described ways in which teachers, with children and parents as co-researchers, studied and conceptualized the individual and group behavior of girls and boys. In Springfield, Missouri, Foshay and his associates (43) explored the nature and change of children's social values and attitudes in the school setting. Finally, Jersild (71) analyzed responses of more than a thousand teachers and other educational personnel who anonymously expressed views regarding their concept of self-understanding. Additional data were obtained from personal conferences, a *Personal Issues Inventory*, and evaluations growing out of work with small groups and several large classes of teachers in graduate courses. Major concerns and their implications were discussed in chapters on facing up to anxiety as an essential concept in education, the feeling of loneliness, sex and selfhood, hostility and self acceptance, the search for meaning, and the concept of compassion.

Unanswered Questions

From the foregoing review one would infer that relatively little is known about what special service personnel—visiting teachers, school social workers, school psychologists, counselors and guidance workers, school nurses, medical officers—are like as persons and what happens to

them as a consequence of their experiences in a school setting. Most of the focus has been upon teachers. To know what is necessary about school personnel and mental health, we probably should conceptualize and design research which links their antecedent experiences and professional education to variations in personality attributes and ways of operating in the school setting. Then we have to ascertain variations in their impact upon boys and girls in elementary and secondary schools as well as upon young men and women in colleges.

Very little attention seems to have been paid to the actual attitudes and expectations of persons in school administration and in supervisory positions in relation to mental health services. Do these attitudes and expectations vary with earlier experiences and present psychological make-up; the location of the school or college and the type of population served in relation to the budget and the type of accommodations for the student population; in privately or publicly supported situations? What are the mental health consequences—for the educational staff as well as for pupils and their parents—of various kinds of relationships among the administrative and supervisory staff, the special service personnel, and the principal and teachers in the school buildings of the system? Should inservice education focus upon skills and working relationships or attend to a deeper level of attitudes and values which have an influence upon interpersonal competence?

Some crucial questions have not been asked and answered by research workers. For example, does a mental health emphasis in education really help in prevention of and recovery from mental illness where there are elementary-school teacher-counselors, a school psychologist, or other special service personnel working individually or as members of a team with teachers and pupils? Would the money spent on special services for mental health in education be expended more effectively on more or better-prepared teachers (or both) so far as a positive effect on the mental health of children, of adolescents, or of young people in college is the criterion? No one appears to have sought definitive answers to such questions under the varying circumstances in which school personnel are concerned with mental health in education.

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CHAPTER VI

School and College Health Services

EDWARD J. DVORAK

PREVIOUS chapters treating this area in the REVIEW OF EDUCATIONAL RE-SEARCH have been focused, by and large, upon developments in the area of school health services. The following review considers significant developments in college health services as well; both are treated simultaneously thruout.

Administration

There has been a progressive increase over the years in the number of schools providing school health services. A survey of 3186 cities having populations of 2500 or more, conducted under the auspices of the U. S. Office of Education (64), revealed that all 93 cities of 100,000 or more population had a school health service; 87 percent of the cities under 10,000 population reported such a service. A more recent survey conducted by the American Dental Association (4) found 87 percent of the cities of 100,000 or more population having school dental programs, while only 47 percent of cities under 5000 reported dental programs in schools. Based on a sampling of 187 school systems, Abrahamsen and others (2) found that some kind of mental hygiene service was available in 83 percent of the schools altho only 15 percent provided the services of trained mental hygiene personnel (psychiatrists, psychologists, and psychiatric social workers).

The agency which finances the school health program ordinarily administers it also. Available evidence compiled in the Kilander report (64) indicates there is a trend toward joint board of education and board of health financing and administration. In 60 percent of the city schools, school health services were administered by the board of education; in 11 percent by the board of health; in 23 percent jointly by the boards of education and health; and in 6 percent by other authorities. One U. S. Office of Education survey (110) conducted in 1940 revealed that for all cities of 10,000 and above, 73 percent were administered by the board of education; 14 percent by the board of health; and only 13 percent by joint authority.

At a lower level, various administrative plans were reported (64). In 34 percent of the city schools, school health services, health instruction, and physical education were each under a separate head, while in 53 percent of the schools the three programs were under one administrative head. The three variations of the latter plan in order of frequency were: (a) physical education had administrative control over both the health service and health instruction, (b) the health service had administrative control

over both health instruction and physical education, and (c) health instruction had administrative control over both health service and physical education. The remaining 13 percent of the city schools reported various other administrative plans.

The quality and scope of school health services are dependent upon available qualified personnel. Larger cities had the highest percentages of health service personnel employed, while the smaller cities had a markedly lower proportion of staff members available to carry on school health service programs, particularly in the case of physicians and dental personnel. Over 85 percent of all city schools reported the availability of nursing services (64).

Culbert, Jacobziner, and Ollstein (25) described inservice training programs for school health personnel in a metropolitan area as well as progress made in including school health service orientation in medical school curriculums. Smiley (99), in a questionnaire study, revealed many of the current school nursing problems which may have implications for both inservice and preservice training of nurses. This survey added further evidence of the need for objective study of the relative merits of a specialized school nursing service under the board of education as against services rendered to schools as a part of a generalized public health nursing service under a local board of health. Grossman (41) found similar school nursing problems under each administrative plan in his study of school nursing problems in three California counties.

The trend toward joint administration of school health services on the local level has already been noted. The literature is rich in evidence of interagency and interdisciplinary cooperative planning for the solution of school health problems. On the international level, many professional disciplines representing many countries of the world combined efforts to formulate suggested standards and policies for school health services in the report of the Expert Committee on School Health Services of the World Health Organization (117). On the national level, the Joint Committee on Health Problems in Education (87) produced an excellent text, *School Health Services*. Seventeen national agencies and organizations were represented on the National Committee on School Health Policies (86) which prepared *Suggested School Health Policies*. The Fifth National Conference on Physicians and Schools called by the American Medical Association (6) in 1955 aimed at agreeing on policies for joint action by education, public health, and medicine for the development of effective health services for school children. Shaffer (97) described the joint planning efforts of the American Academy of Pediatrics and the American Public Health Association.

In a survey of all state health officers, Underwood (108) reported that five states had a single unified school health program, jointly operated by the state health and education authorities. Only four states had no plan for coordination, while the other states had plans of some kind for joint planning. Dukelow and Hein (32) found that, of 42 state medical associa-

tions responding to a questionnaire, 32 had committees "in some way" concerned with the school health program. Kidd (63) described the state-level, multi-agency consultant services available to school systems in Louisiana for the improvement of local school health services. Hein and Dukelow (51), in a survey to determine the extent of local medical association participation in school health programs, found that 34 percent of the responding societies were officially concerned with school health. In 9 out of 10 communities with school health councils, the medical association was represented. Several accounts of local studies and demonstrations (12, 27, 95, 100) were published and provide excellent examples of joint cooperation among professional and lay workers for the solution of local school health problems.

The nature and extent of college health services have been well described in the American College Health Association report of a personal interview survey of 1157 colleges in 1953 (84). This study revealed that 200 colleges (17 percent of the total) claimed no responsibility for the health of their students. The incidence of colleges without health programs was highest in two-year colleges, colleges offering a specialized academic curriculum, and colleges with an enrolment under 500. Young (124) also collected data by personal interviews in a study of the health programs of 40 teachers colleges and found that 15 colleges had full-time physicians, 19 had part-time physicians, and six made no provision for such medical services.

There has been an apparent increase in the number of colleges providing facilities to deal with mental and emotional problems. Gundle and Kraft (42), in a questionnaire study of 1141 colleges in the United States, Canada, and United States territories, found that 51 percent of the colleges responding had facilities to deal with mental and emotional problems. In 1936, Raphael, Gordon, and Dawson (92) had found that only 30 percent of the colleges surveyed maintained an organized program concerned with these types of problems. In the earlier study, 43 units were reported to be under psychiatric direction, while 17 years later, 87 units were found to be under psychiatric direction (42).

A committee of the Fourth National Conference on Health in Colleges outlined the three main administrative patterns for college health services in order of preference as follows: (a) the health service director reports directly to the president or other administrative officer; (b) he reports to an intermediate officer such as a vicepresident or dean; and (c) he is responsible to a health council (19). Moore and Summerskill (84) found that about 4 out of 10 colleges with a health program had a committee or board on student health. Where committees or boards existed, they were responsible for over-all supervision of the health service at 54 percent of the colleges. The health service director was a physician at 42 percent of the colleges and a nurse at 23 percent; most of the directors at the remaining colleges came from the fields of general or physical education.

Financial support for college health services was found to come from tuition fees or general college funds at 59 percent of the colleges and from

a special health fee at 30 percent. The remaining colleges financed their
health service thru insurance plans or on a fee-for-service basis (84).

The basic elements of school health services and college health services
are essentially the same. One significant difference in philosophy and
practice between the two exists and should be pointed out. The primary
functions of school health services (87) are to identify health problems,
adjust school programs to the needs of children, and make known to
parents those children who apparently need medical and/or dental care.
The responsibility for providing medical and dental care is a family re-
sponsibility, and school health services merely supplement the health care
parents should provide for their children. At the college level, the typical
college student is far removed from his family physician. College adminis-
trators, in general, have recognized the need for providing readily accessi-
ble clinical care for their students. Summerskill (103) at Cornell Uni-
versity analyzed the medical records of 1155 students from the time they
matriculated until the time they withdrew from school and found that
1100 of this group required medical care during one to eight semesters
during their stay. On the average, a student was found to have had six
illnesses or injuries while enrolled. Moore and Summerskill (84) in their
survey of college health services found that 957 colleges reported some
kind of health program; of these, 768 (80 percent) reported a clinical
program for the care of accidents or illness among students.

Appraising and Improving Student Health

One of the main functions of school and college health services is
that of appraising student health. This is achieved thru medical examina-
tions and by various screening procedures. A wide variety of practices
exist relative to the number of medical examinations which are required
in elementary and secondary schools. The previously cited study on *Health
Services in City Schools* (64) revealed the following information on this
point: (a) no medical examination required, 17 percent; (b) 1 examina-
tion, 18 percent; (c) 2 examinations, 8 percent; (d) 3-4 examinations,
22 percent; (e) 5-6 examinations, 16 percent; (f) 7-8 examinations, 5
percent; (g) 9-10 examinations, 2 percent; (h) 11-12 examinations, 4
percent; and (i) 13-14 examinations, 9 percent.

A few studies have been carried out to evaluate the effectiveness of the
Astoria Plan of school health services which emphasizes examining on
a referral basis rather than routinely. Jacobziner (58) analyzed the diag-
noses of 144 school physicians in New York City for a period of 10 school
days. He found that 47 percent of the total defects were newly discovered
during the study. On the basis of these findings he recommended more
routine examinations. Yankauer (120), in his study of 334 elementary-
school children, identified only 22 adverse conditions which were unknown
to the school medical service; he concluded that the Astoria Plan func-
tioned efficiently as a case-finding technic.

In a later study, Yankauer and Lawrence (122) reported their first-year experience of a four-year study to evaluate the periodic school medical examination. A 15-percent sample of Grade I pupils of 70 elementary schools of Rochester, New York, was examined in 1952-53 with a plan for subsequent examinations during each of the following three years. The first-year experience disclosed that only 21 children out of 997 previously examined were found to have adverse conditions neither known to the school nor receiving care. The authors concluded that a complete examination of a grade which had been examined the year previously was fruitless from a case-finding standpoint. At the termination of the study there should be available more adequate data on which to base a recommendation for the frequency of periodic medical examinations for elementary-school children.

Dukelow (31) pointed out the criteria which should be met before a screening procedure is utilized in a school health program. He emphasized the importance of capitalizing on the educational possibilities of screening procedures.

Eyesight

Haines (46) and Kephart (62) demonstrated the need for adequate vision for academic achievement. Crane and others (22) studied several methods of screening for vision in the St. Louis Public Schools. Complete ophthalmological examinations were conducted on 609 Grade VI pupils and 606 Grade I pupils from 14 elementary schools. Ophthalmologic clinical judgment as to whether or not a pupil needed to be referred was the criterion against which results of screening procedures were evaluated. In general, for all screening procedures, the greater the number of correct referrals, the greater were the number of incorrect referrals. This study did not permit a conclusion that one procedure was superior to others. It did provide objective evidence of the strong and weak points of the various procedures that can be used by an individual school system in selecting a vision screening method most suited to its local situation. Lancaster and others (69), in a questionnaire study of ophthalmologists in the New England area, found lack of agreement among ophthalmologists on visual acuity standards for referral for eye examinations.

The Ohio State Health Department formed a Professional Advisory Committee on Sight Conservation (90) which formulated suggested standards for school vision screening in an effort to standardize vision conservation programs thruout the state. Johnson (59), Yasuna and Green (123), Leverett (73), and Benton (13) carried out studies to evaluate the effectiveness of the *Massachusetts Vision Test*. These studies pointed out the relatively large numbers of over-referrals resulting from failures in Parts II and III of the test, as well as excessive administration time for these parts. Suggestions were made for changes in the test to make it more effective. Austin (10) described a modified *Snellen Chart*, developed by the

Michigan Health Department, which was found popular among teachers; it could be used successfully with little training. A new visual screening test developed by Diskan (28) was tested on 799 Grade VII and VIII pupils with good results. More study on other age groups is indicated.

A study by Cromwell (23) of 996 pupils during their 12-year school experience disclosed that 69 percent had no visual difficulty during this period, while 25 percent were referred at some time; 7 percent of the group secured glasses when the *Snellen Test* did not pick up the difficulty. Visual difficulties were detected at all grade levels with the fewest occurring during senior high-school years. These findings substantiate the recommendation for annual vision screening in schools. Young (124) in her study of 40 teachers colleges found that about one-fifth of the colleges did no vision screening at all during the four undergraduate years and about one-half of the schools screened students only once, at entrance. Moore and Summerskill (84) reported that 54 percent of the colleges and universities studied required the *Snellen Test* for entering students and an additional 18 percent required a refraction examination for vision.

Hearing

Hearing screening is another procedure routinely carried out in the health service programs. Landis (70), in a report of a hearing survey in Pennsylvania Public Schools, found that about 4 percent of the school population tested had defective hearing. Hayman, Rich, and Stark (50) reviewed a three-year hearing program experience in which 8 percent of 7000 children tested by individual puretone audiometry had a severe or extreme hearing loss. Corliss and Breed (21), in their analysis of hearing tests in the Denver Public Schools, found the highest incidence of hearing difficulties in the elementary grades; hearing loss on the secondary level was less common. This finding supports the recommendation (86) that hearing screening be carried out annually in elementary schools, but only every two years in secondary schools.

In evaluations carried out by Hardy (47) and Yankauer, Geyer, and Chase (121), the individual puretone audiometer test was found to be an efficient method for screening school children for hearing defects. Reynolds (93), in a study of 36 children with mild hearing losses, concluded that minimal hearing loss did not handicap children in their school adjustment or that such a handicap could not be measured with the criteria used. Downs (29), in a pilot study to evaluate the effectiveness of the *Familiar Sounds Test* for screening preschool children, reported this method detected 96 percent of those with significant hearing loss, whereas the individual puretone sweep test detected only 38.5 percent. The assessment was carried out on 331 children in the preschool program of the Denver Public Schools. At the college level, 26 percent of colleges and universities required a hearing examination using mechanical equipment for entering students (84).

Nutrition

Appraisal of the nutritional status of school children is an important function of a health service program. Unfortunately such appraisal is difficult since no one reliable measure of nutritional status has been discovered: four major methods—clinical, chemical, dietary, and growth assessment—make a contribution to the total picture (77). Space permits only a limited review of the vast amount of research in the above categories.

Studies of dietary habits (14, 34, 39, 89) revealed large percentages of school children on diets which did not meet the recommended dietary allowances of the National Research Council in one or more of the essential nutrients. Milk, fruits (particularly citrus), and yellow and green vegetables were found most often to be lacking in the diets with some regional differences being observed. Warnick, Bring, and Woods (114) utilized dietary records, dental and physical examinations, and blood and urine analyses to determine the nutritional status of a sampling of adolescent Idaho children. They found that boys generally consumed more of all nutrients than did the girls, but 25 percent of all diets supplied less than one-half the recommended amount of one or more nutrients; few girls met the iron allowance, but blood tests showed no anemia. In a similar study among 1200 Iowa school children, Eppright and Roderuck (35), in addition to the above examinations, recorded five body measurements of each child. In spite of dietary inadequacies in calcium and ascorbic acid for all children and in iron for girls, a fairly satisfactory state of nutrition was found. Dental caries for all children and obesity for teen-age girls were the principal health problems of the sample studied. Mack and Bowes (75) studied 1268 girls and 1268 boys ranging in age from 12 to 20 years who participated in the Pennsylvania Mass Studies in Human Nutrition from 1940 to 1952 and reported a high incidence of malnutrition. Findings were based on 15 different tests or clinical observations.

Abbott and others (1), using carpal roentgenography, demonstrated the differences in osseous development between well-nourished and undernourished children and suggested this as another means of assessing the nutritional status of school children. Tuttle and others (106) used six physiological responses to determine the effect of omitting breakfast in a study of seven boys whose diets were rigidly controlled. They concluded that maximum work rate and work output were decreased significantly when breakfast was omitted.

Growth

In a study of the effect of nutritive failure on the growth patterns of white children in Alabama, Dreizen and others (30) found the average height difference between the experimental and control groups was 2.42 inches for boys and 1.77 inches for girls thruout the age range of 2 years,

11 months to 15 years, 11 months. The average weight difference at each age interval was 12.74 pounds for boys and 11.34 pounds for girls. Hundley and others (55) studied the heights and weights of first-grade Philadelphia public-school children for the years 1925-1927, 1932-1934, and 1947-1949, and found that children from economically favored areas were taller and heavier. Both economic groups showed a progressive increase in growth; during the depression years, however, the children from the economically favored areas showed a significant deviation from this trend.

The heights and weights of children have long been utilized as a rough screening device. Gross deviations from a child's expected growth pattern have been assumed to be indicative of a possible health problem. Some school systems have adopted growth charts, such as the *Wetzel Grid* or the *Physical Growth Record* proposed by Meredith (80), to assess growth. Garn (37) studied the frequency and extent of deviations from a channel-wise course devised by Wetzel among 97 healthy girls and found the prevailing pattern to be trough-shaped. There was a tendency to lose channel position after age six and to gain channel position in the later years, indicating that the *Grid* does not entirely correct for changes in female body build during growth and maturation. Massler and Suher (78) found a combination of calf girth and height to be a simple and accurate method of calculating "normal" weight in children. Constants were derived for boys and girls and two nomograms were prepared which can easily be used. Using six different anthropometric measures, Sturzebecker (102) concluded that college men of today were decidely larger than college men included in earlier studies. Similarly, Meredith and Meredith (81) found 10- and 11-year-old Oregon children (1950-52) three inches taller and 10 to 15 pounds heavier than the same-aged West-Central California children of 60 years ago.

Dental Health

The extent of the dental health problem on both the school and college levels has been adequately demonstrated (35, 44, 116). Dramatic progress has been made in alleviating the dental caries problem in recent years. Ast and Schlesinger (9) reported the findings of the classical 10-year Newburgh-Kingston water fluoridation study. Newburgh, the study area, supplemented its water supply with sodium fluoride to bring its fluoride content up to 1.0 to 1.2 parts per million. Kingston, also a city of about 30,000 population, located 35 miles from Newburgh, was the control city. At the beginning of the study, Kingston's rate was 20.2 D M F teeth per 100 permanent teeth while the Newburgh rate was 20.6. After 10 years, roentgenographic examinations were made of 1519 Newburgh children aged 6 to 14 and 119 aged 16 who were in continuous residence thruout the period of fluoridation. Kingston children examined numbered 2021 aged 6 to 14 and 119 aged 16. The roentgenograms were randomized so that the interpreters could not know which films were being read. It was

found that the D M F rate for 6- to 9-year-old children in Newburgh was 58 percent lower than that for Kingston children; for the 10- to 12-year-old children 53 percent lower; for 13- and 14-year-old children 48 percent lower; for age 16 the rate was 41 percent lower. Exacting physical examinations of 500 Newburgh and 405 Kingston children disclosed no significant findings which might indicate systemic effects from drinking fluoridated water during this formative growth period. Hutton, Linscott, and Williams (56) and Hill, Blayney, and Wolf (52) also reported the beneficial effects of fluoridated drinking water on the dental health of school-age children. Hagan, Pasternack, and Scholz (45) and Leone and others (72), in carefully controlled studies, found that groups of people who drank fluoridated water over a considerable period of time did not differ significantly, medically speaking, from groups who drank unfluoridated water (with the exception of dental fluorosis where the fluoride content was 8 ppm.). The number of communities reported to the American Dental Association's Council on Dental Health (5) as receiving fluoridated water was 1138 representing a total population of 22.7 million.

A series of four topical applications of a 2-percent sodium fluoride solution, preceded by a dental prophylaxis, was demonstrated to reduce dental decay by as much as 40 percent (61, 66). Fluoride treatments to all pupils of certain ages were provided by dentists in 8 percent of the cities and by hygienists in 12 percent of the cities which responded to the previously cited American Dental Association study (4). In a questionnaire study, Menczer (79) found that 67 percent of the respondents among the 94 school superintendents in cities of more than 90,000 population endorsed the practice of excusing children during school hours to receive private dental care.

Mental and Emotional Health

There is a great need for the development of practical methods of screening school children for mental and emotional problems (57). On the basis of subjective ratings, Ullmann (107) found that teachers thought 8 percent of 810 Grade IX children would be likely to have serious adjustment problems. Teachers tended to rate boys more maladjusted than girls on a 4:1 ratio. Tait, Hodges, and Duval (104) used Gluek's social factors to estimate the chances of delinquency among 73 elementary-school "behavior problems." Of the referred group, 75 percent had Gluek scores indicating 63 percent or better chances of delinquency. A one-year follow-up offered strong evidence of the value of early treatment for these children and their families.

Harrison (49), in a follow-up study of 179 Yale students who left school for emotional reasons, found that 86 returned to Yale within eight years of their leaving. Of this group 69 percent graduated, while 31 percent left again before graduating. Only the factor of academic standing before leaving was significantly related to a student's chances of returning to Yale.

Among University of Florida students, Staton and Rutledge (101) found a significant positive relationship between the existence of certain emotional problems and the frequency of somatic illness. Darling and Summerskill (26) successfully employed the *Bell Adjustment Inventory* as a screening device to predict the success or failure of obese college students in losing weight. Hinckley and Hermann (53) studied the role of group psychotherapy in a college health service setting and, on the basis of their experience, reported some of its limitations, hazards, and potentialities.

Miscellaneous Health Problems

Screening for conditions of relatively low incidence is occasionally carried out in school health programs. Pronovost (91) reported the results of a survey to determine the extent of services available to deal with speech and hearing handicaps and found that 60 percent of those diagnosed as speech handicapped were receiving speech correction. Morley (85) at the University of Michigan found the average incidence of clinical speech cases to be 4 percent of all new students for the period 1941-1951.

Several studies (17, 76, 94, 96) have been carried out to determine the incidence of organic heart disease among school populations. The incidence was found to vary between 1 and 9.4 per 1000 in the samples studied. Cahan (18) described the excellent cardiac services available thru the Philadelphia Public Schools and reported that 15 percent of the 10,864 children referred, were diagnosed as having definite organic heart disease. Among a sample of over 11,000 University of California students, Goggio (40) found 3.8 cases of confirmed congenital heart disease per 1000 students, while Shearer, Sikkema, and Holden (98) found a rate of 2.0 per 1000 among University of Colorado students.

Weaver and Lofthouse (115) questioned the validity of routine testing of urine for screening purposes in school health examinations: 22,136 urinalyses discovered only three new cases of diabetes. Of 247 positives for protein, follow-up investigations disclosed an overwhelming majority to be negative, benign, or of little significance.

An effective system is necessary to record the results of screening procedures carried out in the school program. The essentials of a good record system have been adequately described (7). About 75 percent of college health services with health programs reported they kept cumulative health records for individual students (84).

Follow-Thru on Health Problems

Discovering conditions which require professional attention is meaningless unless a follow-thru program is carried out. A conference with the parent at the time of the physical examination or soon thereafter for planning needed medical or other care was reported as a standard procedure in only 44 percent of city schools; 69 percent reported a follow-thru

plan for annual dental supervision and care (64). Parental failure to have defects corrected is a problem of long standing. Hardy (48), in a study to evaluate the effectiveness of the referral methods in a hearing and vision conservation program, found that there was no evidence of anything having been done by the parents for 33 percent of those referred for hearing loss and for 39 percent of those referred for vision. Interpretation to the parent of a child's need for professional care in the case of a hearing loss was done by an otologist and for visual difficulty by a vision consultant; the follow-up of referred cases was accomplished by home visitors or teacher-nurses. Lack of understanding on the part of parents of the meaning of defects found was believed to be an important factor in nonaction. Ability to pay for needed care was not a great factor since 40 percent of the families in the highest economic categories failed to get the child under care as advised. A similar study by Bronson (16) revealed that financial need accounted for the greatest percentage of failures to have defects remedied. On this limited sample of 155 junior high-school cases, it was also found that a telephone call by the nurse and a home call were about equally effective. Additional research seems indicated to uncover more effective follow-thru methods.

Communicable Disease Control

The schools first became concerned with communicable disease control shortly after 1850. Since then control measures have been developed to prevent many of the serious communicable diseases. The most significant recent achievement in this area has been the development of the Salk vaccine to protect against paralytic poliomyelitis.

The largest controlled study ever carried out in the field of communicable disease control was conducted to test the effectiveness of the Salk vaccine (36). Actually two studies were carried out simultaneously: (a) The vaccine was administered to second-grade children with the corresponding first and third grades serving as the control and not receiving the vaccine (Observed Control Study: N = 1,080,680 in the three grades). (b) The Placebo Control Study combined the children of the first three grades; one-half received the vaccine, the other matching half served as strict controls and received a solution similar in appearance which had no influence on immunity to poliomyelitis (N = 749,236 in Grades I, II, and III). Three injections of one cubic centimeter were given intermuscularly at 0, 1, and 5 weeks. Of the total sample, 20.5 percent had complete vaccinations in the Observed Control Study; 26.8 percent had a complete series of vaccine injections and 26.9 percent had a complete series of placebo injections in the Placebo Control Study. Reports of cases were telegraphed to the Vaccine Evaluation Center at the University of Michigan.

Detailed results of the two studies cannot be reported here; the effectiveness of the vaccine was placed at 80 to 90 percent. Undoubtedly, poliomyelitis vaccination will become as routine as smallpox vaccination

at some time in the future when additional study and research provide answers to questions which are yet unanswered relative to its use.

In spite of the known effectiveness of active immunizing agents for diphtheria and tetanus, studies by Chalfen (20) and Lane and Holla (71) demonstrated that large numbers of our school children are not protected against these diseases. Hudson (54) reported similarly with regard to protection against smallpox. Dramatic reductions in the incidence of tuberculous infection among school and college groups have taken place. Jordan and Jordan (60) reported a drop in Mantoux reactors from 14 percent to 1 percent among school children in a 3800 square-mile area of southwestern Minnesota during the period 1930 to 1950. Krug and Glenn (68) reported tuberculin positive reactors dropped from over 49 percent in 1933 to about 10 percent in 1954 among incoming freshmen at Pennsylvania State University. Durfee (33) found that 78 percent of colleges and universities reported tuberculosis case-finding programs in 1953.

Special Health Services

The review to this point has dealt with the traditional aspects of school health services. A few special services which have health implications merit some attention. A written plan for the handling of emergencies which occur within or around the school has been strongly recommended by school health authorities (86); yet Hein and Dukelow (51) found only 37 percent of schools reported a posted procedure to follow in the event of an emergency.

Zindwer (125) demonstrated the need for giving attention to the health of school personnel. Only 13 percent of 843 teachers examined were free from defects or had a negative history. Emotional disturbances were found among 6 percent of the group examined. Pre-employment examinations of teachers were found to be required in 58 percent of the communities; in 54 percent they were required of other school personnel (51).

So far as possible, children with handicaps should participate in regular school activities with normal children (113). It is recognized, however, that there is a point along the continuum of exceptionality which demands the provision of such special services as diagnostic and treatment services, special education, and vocational counseling. Provision of such services requires the cooperation and coordination of education, public health, and welfare agencies. In New York City, Wallace, Wrightstone, and Gall (113) for the school year 1951-52, reported the following ratios of children in special classes to the total school population: 10.5, 8.9, 1.2, and 14.6 per 10,000 school children for the cardiac, orthopedic, braille, and sight-saving groups, respectively. These rates, except for braille, represented significant decreases when compared with similar data for the school year 1938-39.

The need for frequent evaluation of individuals in special classes was demonstrated by Wallace and others (112) during a six-month review

of 210 children where 23 percent were recommended for discharge, 18 percent for screening for admission to special school units for cerebral palsied children, and 7 percent for other types of care. In a two-year study project to determine the feasibility of including programs for the teaching of trainable mentally handicapped children in the schools, Baumgartner (11) concluded such programs were feasible if, in addition to certain other conditions, capable personnel with proper supervision were utilized. Cruickshank (24) noted that the number of collegiate institutions offering one or more courses in special education had increased 146 percent since 1931. He recommended regional rather than state schools for training in special education.

During the 1954-55 school year approximately 11 million children participated in school lunch programs; 80 percent were served Type A lunches (109). Attempts were made to evaluate the impact of such an extensive program on the health of school children. Velat and others (111) studied the nutritional status and diet of children with and without school lunch in two selected elementary schools. Clinical findings showed no consistent difference between children who participated in the school lunch program and those who did not; however, serum carotine and serum ascorbic acid were found to be higher in the children in the school lunch program. Eppright, Marlott, and Patton (34) found that among children who participated in school lunch programs, the frequency of low intakes of most nutrients for boys and of several nutrients for girls was reduced. Meyer, Brown, and Hathaway (82) chemically analyzed 66 Type A lunches in 15 different schools to determine whether one-third of the daily needs were being provided by the school lunch. Of the essential nutrients only riboflavin was found in recommended amounts in all lunches studied. Mirone and Harvey (83) studied and proposed a new menu pattern which would more adequately meet the dietary and caloric needs of the older age groups than does the present Type A school lunch. A lack of awareness of sanitation and lack of training on the part of school lunch personnel was indicated in a questionnaire study conducted by a committee of the American School Health Association (67).

Environmental health and safety are a part of the total health service program in many schools and colleges. Research and new knowledge in the fields of heating, lighting, ventilating, and in other aspects of environmental health and safety have special significance today with the great surge in school building construction. New knowledge in these fields can be economically applied in the initial construction. Recent revisions of state laws and regulations regarding school heating and ventilating in the light of presentday knowledge were reviewed by Yaglou (118). Tinker (105) outlined the requirements for school lighting based on research in this field. Gelperin, Granoff, and Linde (38) studied the effect of ultraviolet light upon incidence of respiratory infections in elementary schools; on the sample used during the four-and-one-half-month study, no significant difference between the experimental and control schools was

demonstrated. The opportunities in environmental health in a university setting were ably presented by Bond (15).

Accidents continue to be the leading cause of death among school-age children. Available data dealing with morbidity indicated that the school jurisdiction accident rate was higher than the nonschool jurisdiction accident rate (88). Among Oregon secondary-school students covered by a student accident insurance plan, Haar and Martin (43) reported an accident rate of 6.2 per 100 students with 52.9 percent of all accidents occurring in physical education classes. In a 1954-55 accident survey of nine colleges and universities conducted by the American College Health Association and the National Safety Council (3), the college which reported the fewest injuries had one for each 156 students, while that with the most reported one for each six students. McFarland (74) recommended an epidemiological approach to the solution of the accident problem; he contended that accidental injuries and deaths follow the same biological laws as do disease processes, and therefore the agent, the host, and the environment all should be considered in the prevention of accidents. Much research needs to be done in accident prevention, particularly in the area of modifying and developing behavior patterns which lead to safe and intelligent action in all life situations. For this we may look to the fields of health and safety education; recent developments in these areas are treated in Chapter VII of this issue.

Evaluation

For growth, direction, and progress, evaluation should be an integral part of all areas of school health services. No instrument has yet been devised to give an exact objective measurement of the over-all effectiveness of any total school health services program. Parts of the over-all program may be evaluated individually in terms of specifically stated objectives which lend themselves to objective measurement or to accurate appraisal by means of empirical or other evidence. The principles of evaluation outlined for health education by Knutson and Shimberg (65) apply equally well in health service evaluation. Yankauer (119) has outlined some sound approaches to evaluating certain phases of health service programs. The School Health Section of the American Public Health Association (8) has provided leadership in the area of school health services evaluation and has made several sound recommendations for extending and improving the quality of evaluation.

Summary

The studies reviewed in this chapter have provided information on the scope and nature of presentday school and college health services, the determination of the extent of various student health problems, and some valuable methods of solving certain of these problems. The literature

has provided ample evidence of the increasing trend in interagency and interprofessional cooperation on all levels in planning and improving school and college health service programs. Areas of needed research have been pointed out in the hope that future investigations may bring solutions to some of our unsolved school and college health problems.

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CHAPTER VII
Health and Safety Education

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RESEARCH in school health and safety education during the past six years was largely descriptive in character and dealt primarily with the health needs of individuals and the status of health and safety education in the schools. Little research was reported during this period on the effectiveness of educational programs in promoting desirable health behavior in school children.

From the point of view of health education in its broader scope, an increasing amount of research was devoted to the social aspects of health. For example, the *Inventory of Social and Economic Research in Health* (43) outlined over 250 research projects focusing primarily upon social and economic factors related to health problems and health programs. In the field of safety education the literature showed a growing emphasis on individual attitudes and group behavior in the total accident picture.

Trends in Health Education

The concept that little of lasting benefit can be accomplished in developing health programs and improving health behavior unless consideration is given to prevailing social and economic forces has been primarily responsible for shaping health policies at the local, national, and international levels. Those concerned estimate that the next two decades should see marked changes in the health status of individuals in the United States, largely as a result of cooperative action of state and federal agencies.

The impact of social forces on health programs was of significance in influencing developmental trends on the international scene. Mayo and Brady (76), in a report on the Eighth World Health Assembly, pointed out that the programs sponsored by this organization placed increased emphasis on integrating health programs within the framework of social and economic developments. Drenckhahn (26) reviewed methods employed by the World Health Organization in attacking health problems of European countries and concluded that the most successful programs of health education were those which assisted people in solving their health problems in harmony with their own particular social backgrounds and patterns of living. The most fundamental work, according to Drenckhahn, was done directly with families, with children, and with local groups. La Cossitt (62), reporting on a health project in Puerto Rico, pointed out that as economic aid was made available, health conditions improved so that by the time the project was terminated, malaria had been eliminated, hookworm brought under control, and the incidence of tuberculosis and venereal disease markedly reduced. Paul and Miller (91), in an excellent

review of case studies of public reaction to health programs in various communities thruout the world, described the ways in which each community utilized its combined resources in attacking local health problems. In each instance the importance of obtaining an intimate knowledge of the community and its people was stressed as the key to the successful initiation and operation of the health program.

The need for helping the people of the world gain an intelligent understanding of their own health problems was emphasized in the report (7) of the World Health Organization. The principal objective of the Organization's program of health education was to extend the use of practical educational methods in public health services and to provide training in health education for both professional and auxiliary health workers. The report indicated that interregional seminars in health education were successful and that visual education materials suited to local conditions might be useful.

In our own country the increasing length of life, chiefly because of reduction in deaths from communicable diseases, may be considered in part a social accomplishment. On the other hand, the increasing numbers being hospitalized each year for mental disorders is a problem which has both social and medical implications. The magnitude of the problem is indicated by the fact that the number of first admissions for long-term care increased more than 60 percent from 1931 to 1951 (80). Public health workers stated that much could be done by giving the general population a clearer understanding of principles of mental health and by acquainting people with the services available for treating mental disorders.

Regional and racial health problems are in a large measure social problems. The report by Hadley (42) on health conditions among the Navajo Indians and O'Hara's study (89) on community resources for rural health pointed out the importance of underlying social and economic conditions. Carothers (20), in studying the African mind in health and disease, identified physical, social, and psychiatric problems characteristic of this racial group which have significance for health education. A four-year study of Regionville (a pseudonym) by Koos (60) on the attitudes of 500 families toward sickness and health described how these people felt about their own health problems and how they attempted to solve them. Included in the report were recommendations for medical training, health education, and social work.

The social aspects of health education were more dramatically emphasized by the advent of the atomic age. The effects of radioactive fall-out on human beings as reported by Arnold (10, 11) and Lapp (66) indicated that this was the most fearful consequence of nuclear warfare. The use of nontechnical magazines in explaining radiation hazards provided an effective medium for educating segments of the public. An illustration is the excellent nontechnical report by Muller (85) on the possible mutation effects caused by radiation.

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Cooperative Planning in School Health Education

Cooperative action among school and community personnel continues to be emphasized in the administration and planning of school health programs. The need for cooperative action was stressed by Dukelow and Hein (28) in a review of the proceedings of the Fifth National Conference on Physicians and Schools. Walker (111) pointed out that altho administrative control of the school health program necessarily rests in the schools, recognition should be given to the fact that the school health program is a part of the total program of community health, thus necessitating a close working relationship between the school and community health authorities. Menczer (78), in a study of the policies of schools relative to the release of children from classrooms for private dental care, reported that approximately two-thirds of the schools surveyed on a nationwide basis authorized the practice of excusing children. Irwin, Humphrey, and Johnson (48) emphasized that the diversity of needs in different communities and the complexity of local problems have frequently been the cause of misunderstandings between public health workers and school authorities.

Only a few studies concerning the effectiveness of cooperative planning for health instruction appeared. Fibel (33), in using a parental interview technic, obtained parents' points of view concerning subjectmatter taught in health education classes on the secondary level. Johns (52) reported that the Fourth National Conference on Health in Colleges recommended the use of instructional teams composed of a wide representation of college personnel as a means of improving health teaching. Drury (27), in a study of health instructional practices in California secondary schools, concluded that community resources were not employed by a majority of the schools. Wilson (114) stressed the importance of close cooperation and planning among school health personnel, teachers, and parents in health counseling and the follow-up of health problems.

Curriculum-Oriented Research on Health

Only a limited number of research studies which supply guides for curriculum construction in health education appeared during the last six years. Wilson (113) stressed the importance of investigating health requirements of the pupils as a basis for developing the instructional program, with particular attention to those needs associated with children's behavior. Walker (111) emphasized the importance of building understandings in children in the upper grades which would enable them to make intelligent choices in health behavior. Kilander (55) pointed out that as they mature, students should have a thoro understanding of facts underlying desirable health behavior based upon an adequate background of science at the senior high-school level. Byrd (19) attempted to arrive

at some consensus about health needs of pupils by asking that they select from a list of 300 health problems those which they would prefer to have included in course content. Malfetti (72), basing course content in health education upon the stated disturbing health problems of 560 students, reported that these problems could be used successfully as focal points for learning experiences. Schwebel and Harris (101) described the use of counseling technics as an aid in solving individual health problems and improving health behavior.

Irwin and Staton (49) and Irwin, Merrill, and Staton (50), thru an analysis of textbooks, periodicals, and vital statistics, presented certain concepts of healthful living which seemed to be of functional value in contributing to the general education of elementary- and secondary-school pupils. The authors recommended that these concepts be used as a basis for curriculum development.

No direct experimental evidence appeared in the literature concerning the relative merits of direct versus correlation methods of health instruction. Meier (77) after listing 931 concepts from health sources, found that 377 identical concepts were found in 14 general science sources examined. He concluded that many concepts traditionally offered in health courses may be vitally and effectively taught in other subjectmatter fields.

As a basis for developing content in college health courses, several investigations were reported on the health status, health attitudes, and practices of college students. Loop and Tipton (70) surveyed health practices of 1033 entering college women. They concluded that if daily health practices were to be used as criteria for course content, greater emphasis needed to be placed on nutrition, exercise, mental and emotional health, and physical status. Sutton (109), in an attempt to determine health needs, tested the health knowledge and practices of a sample of college and university students and analyzed the reasons why students visited the student health services. In a study of methods and technics of teaching health, Bryan (18) found the technics most frequently used in 29 colleges were, in order of frequency, discussion, films, and lectures with discussion.

Only a few investigations were concerned with testing health knowledge and health practices of students. Remmers, Horton, and Mainer (95) analyzed the responses given by a sample of high-school youth to questions about health practices, health insurance, and misconceptions in matters of health. More favorable responses were obtained to the questions in all areas from the urban than from the rural pupils. Dzenowagus and others (30), in a study of health and safety misconceptions of 250 tenth-grade girls, found that 25 percent or more of the subjects subscribed to 111 of the 126 misconceptions. Hinrichs (44) analyzed the responses of 1100 students to a hygiene proficiency test and found that only 1 student in 3 answered as many as 75 percent of the items correctly.

In attempting to get at the problem of communicating with children, Chall and Dale (21) developed a method for determining pupil knowledge

of health terms. Schultz (100) attempted to set up criteria for evaluating free health publications available for use with children in Grades I and II. Konheim and Naiman (59), in studying the effect of free health literature on the parents of 165 college students, concluded that the average level of information was appreciably increased by this method.

Health Interests

Lantagne (64) surveyed the health interests of 10,000 secondary-school students from 10 states, using an interest inventory of 300 items categorized into 21 areas. The areas of major interest, in order, included habit-forming substances, safety, family health, mental health, and health as a social problem. For individual items, the patterns of masculine and feminine interest tended to coincide with the commonly accepted roles the male and female are expected to assume in society. Lewis (69) surveyed the health interests of 3600 children, nine to 18 years of age, in an attempt to determine their health activity interests. Stiles and Watson (107), Kitzinger (58), and Humphrey (46) reported on the health interests of college students, each stressing the importance of giving the concerns of the students major consideration in planning the instructional program.

Sex Education

The development of programs of family life education has provided a natural and logical setting for sex education in the schools. Family life education is broadly conceived, going beyond the traditional bounds of sex education by focusing upon the interpersonal relationships within the family structure and emphasizing the positive goals of successful marriage and family stability. Perhaps the most comprehensive description of the development and operation of programs of family life education is the report by Avery and Kirkendall (12) on *The Oregon Developmental Center Project in Family Life Education.* Strain and Eggert (108), in a survey of the literature on sex education, concluded that adolescents today are troubled by the instability of marriage and are more interested in marriage and its problems than were young people a generation ago. Of the adolescents in 36 communities, 61 percent of the boys and 83 percent of the girls stated that they favored sex education in the schools. Fink (34), in a study of parental reaction to sex education, found that 4 out of 5 adults expressed the view that sex education should be offered in the schools, while only 1 parent in 6 expressed opposition. The possibilities of utilizing a program of family education with adult groups were explored by Crocker (23); the results indicated that the majority of mothers participating in weekly meetings profited from the experience. Benefiel and Zimnavoda (13) found that, of 256 eighth- and ninth-grade pupils exposed to a three-week unit in family life education, over 90 percent stated that the unit had been of benefit. The problem of differences

in attitudes of religious groups to family life education was examined by Osborne (90) who identified some common ground. Howland (45) concluded that the most effective time to offer special work in family life education was in the senior year because dating and social activities at this time tended to remove the individual from parental control. In an analysis of cultural orientation of primary-level reading material published during the past 10 years, Tannenbaum (110) indicated that elementary readers did not adequately depict family life on all social class levels. The author concluded that teachers should inject more realism into children's literature as a means of helping children adjust to family life.

In studying the sex information and attitudes of 700 Oregon high-school boys and girls, Lee (68) showed that adolescents naming the parent as the primary source of information possessed greater sex knowledge than those gaining information elsewhere. No significant differences between the sexes on information test scores were found. Girls appeared to be more liberal than boys in their attitudes toward sex education. Kirkendall (56), in a study of the sex concerns of adolescent boys, discussed some of the specific sex problems expressed by boys between the ages of 15 and 23 years. Lantagne (65), in a survey of the items of interest in marriage and parenthood of 2000 junior-college students, found that the sexes were not in complete agreement on the items of greatest interest but did agree on the items of least concern.

Southworth (103), in a study of 390 Wisconsin high schools, reported that all but one of the schools surveyed provided some means of preparing students for courtship, marriage, and family life. Only 12 of the schools provided a special course in sex education; the majority offered sex education within the structure of such courses as home economics, biology, social science, agriculture, or physical education. Kirkendall and Hamilton (57) presented the point of view that sex education should be included as an integral part of instruction related to personal adjustment and family life.

Gladden (38) described student participation and the results of a research-oriented course in the family offered at the University of Kentucky. He concluded that the experience led undergraduates to face facts and to modify attitudes acquired in their particular subculture. Scates (99), in a review of research and teaching in personal and family living, included general sources of reference for those interested in family life education.

Teacher Preparation in Health Education

Research on teacher preparation in health education during the last six years has been focused primarily upon examining teacher needs, teacher preparation, certification requirements, and inservice education. On the basis of scores achieved on a health knowledge and application test, Mason (74) concluded that the classroom and supervising teachers studied

were inadequately prepared in the basic concepts of health. Dzenowagus, Borozne, and Irwin (31) in a study of the health and safety misconceptions of a sample of prospective elementary-school teachers, found that a large percentage of the group subscribed to a substantial number of the misconceptions listed. Yancey (115) surveyed health misconceptions held by prospective elementary- and secondary-school teachers in Negro colleges in North Carolina and found that 66 percent of the group believed more than one-fourth and 21 percent believed more than one-third of the stated misconceptions.

Moorhead (83), in an examination of the preparation and duties of health teachers in Oregon high schools, found that teacher preparation varied widely and that the training did not follow national recommendations. The assignment of teachers to health classes was frequently made on the basis of convenience in scheduling rather than on the basis of professional preparation. Similar conditions were reported by Dvorak (29) in an inquiry into the preparation of health teachers in Minnesota. The desirability of stressing community-school relations and curriculum construction for health education teachers working for advanced degrees was indicated in a survey by Moffett (81).

A study of health education requirements for certification of secondary-school teachers was completed by Hagg (40). She reported that in the 18 states surveyed there was a trend by state certifying agencies to include health within the professional education requirements.

Trends in the use of workshops for inservice education in health education were discussed by Moorhead (82) and Benell (14). White (112) in an extensive study of the influence of workshops on health programs in Arkansas reported that all major areas of the health program were favorably influenced in those schools which participated in the workshop.

Physical Fitness of Children and Youth

Doubts were raised concerning the muscular fitness of American school children as a result of the research of Kraus and Hirschland (61). Six tests of strength and flexibility of the trunk and leg muscles were used. The authors reported that 57.9 percent of the 4264 American school children tested failed to meet the minimum standard of fitness as compared with only 8.7 percent of the 2870 European children studied. The validity of flexibility as an index of muscular fitness was questioned by Lawther (67) and Rarick (94), who presented evidence from earlier studies on the specific nature of fitness. Fox and Atwood (36) applied the Kraus-Weber test to a group of 575 Iowa City school children and found that members of the study group performed as well as or better than the European children on the five strength tests; the incidence of failure on the flexibility item was higher for the Iowa City children. In a similar study of 1456 Indiana elementary-school children, Phillips (92) found that only on the flexibility measure in the Kraus-Weber test were the

failures high. In the strength items the incidence of failure at eight years was only slightly greater than that of the European children and, by age 12 the two groups were equally successful. The recent publication, *Fitness for Secondary School Youth* (15), reviewed present knowledge on fitness and presented information on the total fitness needs of secondary-school youth.

Evaluation in Health Education

Perhaps the most comprehensive attempt to evaluate the behavioral effects of a health education program was presented in the report of the Kellogg Foundation (54) which employed chiefly indirect but reasonably valid methods in appraising health outcomes. A question-answer device designed to evaluate programs of health education was prepared by Jackson (51). Kaplan (53) found the use of opinion poll technics to be helpful in evaluating the effectiveness of public health education campaigns. Mayshark (75) developed a scale designed to measure the attitudes of seventh-grade pupils toward selected areas of health and safety.

Only a few reports appeared which provide an insight into the health behavior of children, and these studies were not primarily concerned with the effectiveness of health education as such. Potgieter and Morse (93), in studying the food intake records of 1242 Connecticut school children in Grades V to VIII, found that the foods most often lacking were green and yellow vegetables and the foods rich in ascorbic acid. Eating between meals was reported by 97 percent of the children. Similar results were reported by Eppright and Swanson (32) in a statewide study of 1188 Iowa school children. The report disclosed that snacks provided almost as many calories as breakfast and that the food taken between meals was proportionately high in carbohydrates and low in most other nutrients. If it may be assumed that the children included in these two studies had the benefit of an ongoing health education program, then the effects of the program in developing desirable patterns of behavior in respect to food habits left much to be desired.

Safety Education

Figures published by the National Safety Council (86) indicate the magnitude of the accident problem today. According to this source, accidental deaths ranked fourth among the leading causes of death in the United States in 1955, taking a toll of over 93,000 persons. Accidents with children continued to outrank all other causes of death, killing more children between the ages of 5 and 14 years than cancer, congenital malformations, pneumonia, and poliomyelitis combined. In the school-age range, accidents resulted in 38 percent of all deaths at 5 to 14 years, 42 percent at 10 to 14 years, and 49 percent of all deaths at 15 to 17 years.

The accidental death rate trend for the years 1949 to 1955, according to the National Safety Council (86), showed a slight decline for those 5 to 14 years old, but a rather substantial increase in the age range of 15 to 24 years. Over a wider span of years the trend was more favorable for the younger group which, by inference, indicated that safety education did make a difference. For example, since 1920 when safety training was introduced into the schools, the decline in death rate was 59 percent for the 5-to-9-year-olds and 39 percent for the 10-to-14-year-olds. During the same period, however, the death rate for the older group showed an increase.

The Human Element in Accidents

Scientific investigation into the causes of accidents is based upon the premise that accidents result from an interplay of a variety of factors of human origin and are not basically due to chance. Research in the field of safety has, therefore, been directed to studying the physiological and psychological processes which predispose one to accidents or to the circumstances in which accidents are apt to occur. For example, Appel and Scheflen (8) reported that accidents were basically the result of one or of a combination of the following factors: (a) physiological disturbances, (b) neurological conditions, (c) mental deficiencies, (d) psychoses, or (e) unstable emotional patterns of behavior. People with the latter difficulty tended to be accident repeaters, the accident being merely a symptom of a deep-seated emotional upset. Langford and others (63) found that children who were accident repeaters were not different mentally or physically from those having no accidents, but their reactions to stress were inclined to be impulsive and their play behavior tended to be disorganized.

Distraction has been emphasized as a factor in accidents. Grimaldi (39), after examining the effects of sounds of different intensities and frequencies, reported that precision and speed of neuro-muscular response tended to be reduced in the presence of noise in the higher frequencies and at intensities above 90 decibels.

Sanford (98) stressed the importance of educating the adult population as a means of reducing the accident rate for both children and adults. Evidence was cited that accidental deaths of young children caused by fire, poisoning, motor vehicles, suffocation, and electrocution, were largely the result of faulty behavior or poor judgment on the part of adults. Dearborn (25) concluded that safety, altho partly a function of the behavior of the individual, depended also upon the interaction of individuals and groups.

In a study of the effects of a long-range health and safety educational campaign designed for the benefit of policy holders, the Metropolitan Life Insurance Company (79) reported that home accidents declined 53.7 percent during the period 1934 to 1952 and occupational and civilian accidents dropped 50 percent in the years 1942 to 1952. McGhee (71) stressed

the importance of building attitudes, rather than specific skills, thus plac-
ing the burden of safety upon the entire community.

Accidents in the Schools

A test of the effectiveness of school programs of safety education is
the accident trend in our public schools. The Los Angeles City School
System (97) indicated that the reportable accident frequency rate declined
substantially over the three-year period ending in 1954. The analysis
showed that 52 percent of all high-school accidents occurred in the athletic
program altho the days lost per accident for this group were only 0.18
as compared with 1.52 days for all students. In the Green Bay, Wisconsin,
City Schools (102) the accident frequency rate from 1938 to 1954 showed
considerable fluctuation with little change in 1954 as compared with 1938.
Spadafora (105) found that 40 percent of school building accidents oc-
curred in the gymnasium, swimming pool, and showers. The problem
confronting the schools was indicated by the fact that well over half
the total pupil accidents occurred while the victims were under school
jurisdiction, either on school premises or going to and from school.
Hurley (47), in a five-year study of shop accidents in New York City,
concluded that the vocational schools had an accident rate lower than
that of elementary schools, or junior or senior high schools.

Accidents to school children fluctuate with season of year and time of
day. Spadafora (104) reported that accidents at the elementary-school
level had the highest frequency in May. Haar and Martin (41) found that
in Oregon secondary schools the months of January, October, and February
were highest in accident frequencies with the most hazardous time of day
being between the hours of 3 p.m. and 4 p.m.

Since athletics represents the greatest single safety hazard at the
secondary-school level, the schools have become increasingly concerned
about methods of coping with this problem. Forsythe (35), in a survey of
football injuries in Michigan, Minnesota, and Wisconsin high schools,
provided information on those aspects of the game which were most dan-
gerous and made recommendations for equipment best suited to give the
players protection. The study pointed out that dental, face, and nose in-
juries ranked highest among football injuries. In a study of athletic in-
jury benefit plans covering 32 states, Marks (73) reported that state
association plans were more numerous than commercially underwritten
plans.

Status of Safety Education in Schools and Colleges

In the area of safety education a 1956 survey conducted by the Na-
tional Safety Council (87) showed that 411 colleges in 46 states, the Dis-
trict of Columbia, and Puerto Rico offered 768 courses in general safety
and driver education. This represented a substantial increase in course

offerings and in colleges offering courses when compared with data for the previous year.

In a study of current safety practices in the school systems of 56 selected cities, Gilliland (37) concluded that inadequate safety instruction was provided in a large number of schools. Schools offering instruction did so thru a variety of approaches such as correlation, integration, separate course offerings, and co-curriculum activities. Boyd (16) investigated the safety practices in physical education for boys in 648 secondary schools in North Carolina and concluded that safety conditions were generally poor for the schools studied.

The 1955 and 1956 surveys (5, 6) of accidents to college students provided evidence that the accident problem for this group needed the attention of college authorities. The report disclosed that 1 student in 9 was accidentally injured during the school year and that 1 injured student in 11 was hospitalized. Arm (9) pointed out the need for safety education in colleges; he emphasized that the program should be integrated into every activity on the campus following the general pattern employed so successfully by industry.

Stack (106) reviewed the evidence on the progress achieved in safety education by citing the decline in child traffic deaths, the successful record of school-trained drivers, and the impetus given to the safety movement by colleges thru the training of safety teachers as well as the increased concentration on research in safety. The research interest of colleges and universities in safety is reflected by the recent publication, *25 Years of Research in Safety Education* (24), which is a summary of safety research on the doctoral or equivalent level. A detailed listing of needed research in safety education with a listing of selected studies in this area is presented in *Research in Safety Education* (96).

Driver Education

According to Brody and Stack (17), over one million fatalities from motor vehicle accidents have occurred in the United States within the last 60 years with an annual fatality rate of approximately 37,000 deaths each year. On the basis of present trends, these writers estimated that 1 in every 2 persons now living will in his lifetime be involved in a serious motor vehicle accident. Evidence of the concern which many schools have for this problem is indicated by the fact that in 1953 driver education was offered in 8653 high schools with the registration reaching a total of 788,981 pupils (17).

The question arises as to how effective driver education programs are in promoting safe driving. The Connecticut State Department of Education (22) reported that for the seven-year period, 1948 thru 1955, 4.3 percent of the operators with driver training, and licensed during the 1948-49 school year were involved in accidents. During the same period 10 percent of those not receiving driver training had been involved in

accidents. The Traffic Engineering and Safety Department of the American Automobile Association (4) gave summary data on studies conducted in 13 states which provided objective evidence that high-school boys completing driver training courses had a lower frequency of accidents than did those not having the benefit of driver training. A 1955 report (1) on the accident reduction value of high-school driver education showed that, in 4 of the 11 states for which data were comparable, the male driver receiving driver training had 19 percent fewer accidents than did the untrained driver. The female with driver training experience had 51 percent fewer accidents than the untrained. According to Allgaier (3) recent data on the effectiveness of driver education courses showed that the accident rate, both fatal and nonfatal, was only half as great for the trained drivers as for the untrained. Research workers recognize that in many of these studies a certain element of bias may have been introduced because the students electing driver education courses could have been a select and highly responsible group of students.

In terms of the more lasting effects of driver education the picture is less clear. Observations on a year-by-year basis over a four-year period indicated that initial differences between the trained and untrained driver tended to become less over time (1).

The Safety Section of the Los Angeles City School System recently released data on the effectiveness of the Aetna Drivotrainer as compared with results achieved from the California state-prescribed course in driver education (2). While the measured differences in driving skill and knowledge were similar for both groups, driving ability as measured by the road test showed a slight superiority in favor of the group following the prescribed course of study. O'Connor (88) reported that experimental work with the Drivotrainer in the New York City School System showed that while the Drivotrainer did not eliminate the need for actual road training, expensive on-the-road time could be substantially reduced by the intelligent use of this device. Moseley (84) presented data on the relative effectiveness of the trained and untrained teacher, methods of communication between teacher and student during driving instruction, and driver behavior in emergencies.

Conclusion

The present review has been directed primarily to research in school health and safety education and, therefore, has touched on only a portion of the research in the field of public health education. It is apparent from recent trends that greater emphasis in the future will be placed upon the social aspects of school and community health education. It is commendable that much of the research during the past six years has been concerned with the health and safety needs of children. In the field of safety education, attempts are being made to evaluate the results of safety education and driver education programs. However, more well-controlled studies

need to be made of the effects of health education upon the health behavior of human beings in order that valid appraisals may be made of the work done in this area.

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LANGUAGE ARTS, FINE ARTS, NATURAL SCIENCES, AND MATHEMATICS: X:2 (April 1940); XI:4, Part 1 (October 1941); XII:4 (October 1942)*; XIII:2 (April 1943)*; XV:4 (October 1945)*; XVI:2 (April 1946); XVIII:4 (October 1948); XIX:2 (April 1949); XXI:4 (October 1951); XXII:2 (April 1952); XXV:2 (April 1955).

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SPECIAL PROGRAMS: VI:5 (December 1936); X:5 (December 1940); XI:3 (June 1941)*; XI:4, Part 2 (October 1941)*; XIII:5 (December 1943); XIV:3 (June 1944)*; XIV:4 (October 1944)*; XVI:5 (December 1946); XVII:3 (June 1947)*; XVII:4 (October 1947); XIX:5 (December 1949); XX:3 (June 1950)*; XX:4 (October 1950); XXIII:2 (April 1953); XXIII:3 (June 1953); XXIII:5 (December 1953); XXIV:1 (February 1954); XXIV:4 (October 1954); XXVI:4 (October 1956); XXVI:5 (December 1956).

TEACHER PERSONNEL: I:2 (April 1931); IV:3 (June 1934); VII:3 (June 1937)*; X:3 (June 1940); XIII:3 (June 1943); XVI:3 (June 1946)*; XIX:3 (June 1949)*; XXII:3 (June 1952); XXV:3 (June 1955).

Forthcoming Issues

INTERNATIONAL EDUCATIONAL RESEARCH, February 1957. Victor H. Noll, *Chairman*.

GUIDANCE. April 1957. Dugald S. Arbuckle, *Chairman*.

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* Out of print.